

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
30 November 2000 (30.11.2000)

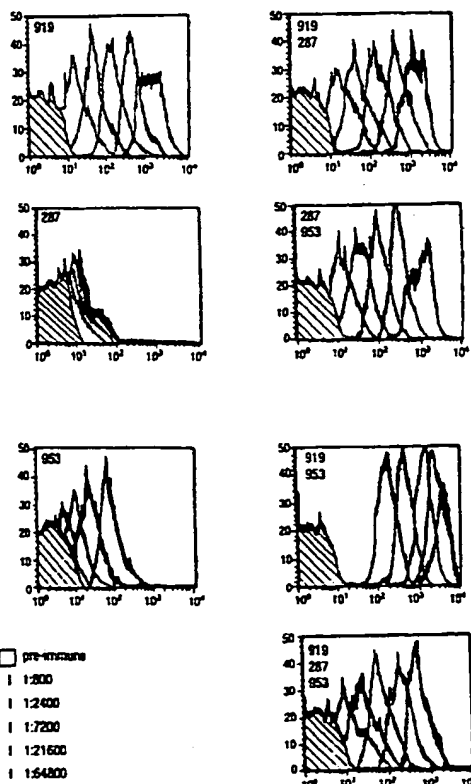
PCT

(10) International Publication Number  
WO 00/71725 A2

- (51) International Patent Classification<sup>7</sup>: C12N 15/31. C07K 14/22. A61K 39/095
- (21) International Application Number: PCT/IB00/00828
- (22) International Filing Date: 19 May 2000 (19.05.2000)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
9911692.3 19 May 1999 (19.05.1999) GB  
9919705.5 19 August 1999 (19.08.1999) GB  
0005730.7 9 March 2000 (09.03.2000) GB
- (71) Applicant (for all designated States except US): CHIRON S.p.A. [IT/IT]; Via Fiorentina, 1, I-53100 Siena (IT).
- (72) Inventors; and  
(75) Inventors/Applicants (for US only): GIULIANI, Marzia, Monica [IT/IT]; Chiron S.p.A., Via Fiorentina, 1, I-53100 Siena (IT). PIZZA, Mariagrazia [IT/IT]; Chiron S.p.A., Via Fiorentina, 1, I-53100 Siena (IT). RAPPUOLI, Rino [IT/IT]; Chiron S.p.A., Via Fiorentina, 1, I-53100 Siena (IT).
- (74) Agents: HALLYBONE, Huw, George et al.: Carpmaels & Ransford, 43 Bloomsbury Square, London WC1A 2RA (GB).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

[Continued on next page]

(54) Title: COMBINATION NEISSERIAL COMPOSITIONS



(57) Abstract: Compositions comprising a first biological molecule from a *Neisseria* bacterium and a second biological molecule from a *Neisseria* bacterium. The term "biological molecule" includes proteins and nucleic acids. Preferred *Neisseria* species are *N. meningitidis* and *N. gonorrhoeae*.

WO 00/71725 A2



(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— Without international search report and to be republished upon receipt of that report.

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

## COMBINATION NEISSERIAL COMPOSITIONS

All documents cited herein are incorporated by reference in their entirety.

### FIELD OF THE INVENTION

This invention relates to compositions comprising combinations of biological molecules from  
5 *Neisseria* bacteria, particularly *N.meningitidis* and *N.gonorrhoeae*.

### BACKGROUND ART

*Neisseria meningitidis* and *Neisseria gonorrhoeae* are non-motile, Gram negative diplococci that are pathogenic in humans.

Based on the organism's capsular polysaccharide, 12 serogroups of *N.meningitidis* have been  
10 identified. Group A is the pathogen most often implicated in epidemic disease in sub-Saharan Africa. Serogroups B and C are responsible for the vast majority of cases in the United States and in most developed countries. Serogroups W135 and Y are responsible for the rest of the cases in the United States and developed countries.

The meningococcal vaccine currently in use is a tetravalent polysaccharide vaccine composed  
15 of serogroups A, C, Y and W135. Meningococcus B remains a problem, however. The polysaccharide approach cannot be used because the menB capsular polysaccharide is a polymer of  $\alpha(2-8)$ -linked N-acetyl neuraminic acid that is also present in mammalian tissue. One approach to a menB vaccine uses mixtures of outer membrane proteins (OMPs). To overcome the antigenic variability, multivalent vaccines containing up to nine different porins  
20 have been constructed [eg. Poolman JT (1992) Development of a meningococcal vaccine. *Infect. Agents Dis.* 4:13-28]. Additional proteins to be used in outer membrane vaccines have been the opa and opc proteins, but none of these approaches have been able to overcome the antigenic variability [eg. Ala'Aldeen & Borriello (1996) The meningococcal transferrin-binding proteins 1 and 2 are both surface exposed and generate bactericidal antibodies capable of killing  
25 homologous and heterologous strains. *Vaccine* 14(1):49-53].

Given the propensity for meningococcal disease during non-epidemic periods to be caused by multiple strains or strain variants [Russel *et al.* (1998) *Abstracts of 11th International pathogenic Neisseria conference*, page 281] together with frequent temporal shifts in the predominant strains in a community, it seems that a universal meningococcal B vaccine will  
30 require more than one antigenic species.

## DESCRIPTION OF THE INVENTION

Neisserial protein and nucleotide sequences are disclosed in the following documents:

- WO 99/24578
  - WO 99/36544
  - 5      • WO 99/57280
  - WO 97/28273
  - WO 96/29412
  - WO 95/03413
  - Tettelin *et al.* (2000) *Science* 287:1809-1815
- 10   For ease of reference, the sequences disclosed in these documents are referred to in the present application according to the following table:

Document	Original sequence numbering	Sequence numbering in this application
WO 99/24578	SEQ IDs 1-892	SEQ IDs 1-892
WO 99/36544	SEQ IDs 1-90	SEQ IDs 893-982
WO 99/57280	SEQ IDs 1-3020	SEQ IDs 983-4002
WO 97/28273	Figure 4 coding DNA Figure 4 protein Figure 9 coding DNA Figure 13 DNA Figure 13 protein	SEQ ID 4003 SEQ ID 4004 SEQ ID 4005 SEQ ID 4006 SEQ ID 4007
WO 96/29412	SEQ IDs 1-26	SEQ IDs 4008-4033
WO 95/03413	SEQ IDs 1-23	SEQ IDs 4034-4056
Tettelin <i>et al.</i> (2000) <i>Science</i> 287:1809-15	NMB0001-2160 (DNA) NMB0001-2160 (encoded proteins)	SEQ IDs 4057-6216 SEQ IDs 6217-8376

The present invention provides compositions comprising a first biological molecule from a *Neisseria* bacterium and a second biological molecule from a *Neisseria* bacterium. The term "biological molecule" includes proteins and nucleic acids.

- 15   The compositions may also comprise further biological molecules, preferably also from *Neisseria*, that is to say the compositions may comprise two or more biological molecules (*eg.* 3, 4, 5, 6, 7, 8 *etc.*), at least two of which are from a *Neisseria* bacterium (*eg.* 3, 4, 5, 6, 7, 8 *etc.*). Such compositions include those comprising (i) two or more different Neisserial proteins.

(ii) two or more different Neisserial nucleic acids, or (iii) mixtures of one or more Neisserial protein and one or more Neisserial nucleic acid.

In one preferred embodiment, the first and second biological molecules are from different *Neisseria* species (eg. one is from *N. meningitidis* and one is from *N. gonorrhoeae*), but they may  
5 be from the same species. The biological molecules in the compositions may be from different serogroups or strains of the same species.

The first biological molecule is preferably selected from the group consisting of SEQ IDs 1-8376. More preferably, it is selected from the group consisting of SEQ IDs 1-4002 and/or SEQ IDs 4057-8376. It is preferably a purified or isolated biological molecule.

10 The second biological molecule is preferably selected from the group consisting of SEQ IDs 1-8376. More preferably, it is selected from the group consisting of SEQ IDs 1-4002 and/or SEQ IDs 4057-8376. It is preferably a purified or isolated biological molecule.

One or both of the first and second biological molecules may be a Neisserial biological molecule which is not specifically disclosed herein, and which may not have been identified,  
15 discovered, made available to the public or purified before this patent application was filed.

In particular, the invention provides a composition comprising one or more of the following pairs of first and second biological molecules (listed by SEQ ID):

First	Second	24	1-23 and 25-8376	48	1-47 and 49-8376
1	2-8376	25	1-24 and 26-8376	49	1-48 and 50-8376
2	1 and 3-8376	26	1-25 and 27-8376	50	1-49 and 51-8376
3	1-2 and 4-8376	27	1-26 and 28-8376	51	1-50 and 52-8376
4	1-3 and 5-8376	28	1-27 and 29-8376	52	1-51 and 53-8376
5	1-4 and 6-8376	29	1-28 and 30-8376	53	1-52 and 54-8376
6	1-5 and 7-8376	30	1-29 and 31-8376	54	1-53 and 55-8376
7	1-6 and 8-8376	31	1-30 and 32-8376	55	1-54 and 56-8376
8	1-7 and 9-8376	32	1-31 and 33-8376	56	1-55 and 57-8376
9	1-8 and 10-8376	33	1-32 and 34-8376	57	1-56 and 58-8376
10	1-9 and 11-8376	34	1-33 and 35-8376	58	1-57 and 59-8376
11	1-10 and 12-8376	35	1-34 and 36-8376	59	1-58 and 60-8376
12	1-11 and 13-8376	36	1-35 and 37-8376	60	1-59 and 61-8376
13	1-12 and 14-8376	37	1-36 and 38-8376	61	1-60 and 62-8376
14	1-13 and 15-8376	38	1-37 and 39-8376	62	1-61 and 63-8376
15	1-14 and 16-8376	39	1-38 and 40-8376	63	1-62 and 64-8376
16	1-15 and 17-8376	40	1-39 and 41-8376	64	1-63 and 65-8376
17	1-16 and 18-8376	41	1-40 and 42-8376	65	1-64 and 66-8376
18	1-17 and 19-8376	42	1-41 and 43-8376	66	1-65 and 67-8376
19	1-18 and 20-8376	43	1-42 and 44-8376	67	1-66 and 68-8376
20	1-19 and 21-8376	44	1-43 and 45-8376	68	1-67 and 69-8376
21	1-20 and 22-8376	45	1-44 and 46-8376	69	1-68 and 70-8376
22	1-21 and 23-8376	46	1-45 and 47-8376	70	1-69 and 71-8376
23	1-22 and 24-8376	47	1-46 and 48-8376	71	1-70 and 72-8376

72	1-71 and 73-8376
73	1-72 and 74-8376
74	1-73 and 75-8376
75	1-74 and 76-8376
76	1-75 and 77-8376
77	1-76 and 78-8376
78	1-77 and 79-8376
79	1-78 and 80-8376
80	1-79 and 81-8376
81	1-80 and 82-8376
82	1-81 and 83-8376
83	1-82 and 84-8376
84	1-83 and 85-8376
85	1-84 and 86-8376
86	1-85 and 87-8376
87	1-86 and 88-8376
88	1-87 and 89-8376
89	1-88 and 90-8376
90	1-89 and 91-8376
91	1-90 and 92-8376
92	1-91 and 93-8376
93	1-92 and 94-8376
94	1-93 and 95-8376
95	1-94 and 96-8376
96	1-95 and 97-8376
97	1-96 and 98-8376
98	1-97 and 99-8376
99	1-98 and 100-8376
100	1-99 and 101-8376
101	1-100 and 102-8376
102	1-101 and 103-8376
103	1-102 and 104-8376
104	1-103 and 105-8376
105	1-104 and 106-8376
106	1-105 and 107-8376
107	1-106 and 108-8376
108	1-107 and 109-8376
109	1-108 and 110-8376
110	1-109 and 111-8376
111	1-110 and 112-8376
112	1-111 and 113-8376
113	1-112 and 114-8376
114	1-113 and 115-8376
115	1-114 and 116-8376
116	1-115 and 117-8376
117	1-116 and 118-8376
118	1-117 and 119-8376
119	1-118 and 120-8376
120	1-119 and 121-8376
121	1-120 and 122-8376
122	1-121 and 123-8376
123	1-122 and 124-8376
124	1-123 and 125-8376
125	1-124 and 126-8376
126	1-125 and 127-8376
127	1-126 and 128-8376
128	1-127 and 129-8376

129	1-128 and 130-8376
130	1-129 and 131-8376
131	1-130 and 132-8376
132	1-131 and 133-8376
133	1-132 and 134-8376
134	1-133 and 135-8376
135	1-134 and 136-8376
136	1-135 and 137-8376
137	1-136 and 138-8376
138	1-137 and 139-8376
139	1-138 and 140-8376
140	1-139 and 141-8376
141	1-140 and 142-8376
142	1-141 and 143-8376
143	1-142 and 144-8376
144	1-143 and 145-8376
145	1-144 and 146-8376
146	1-145 and 147-8376
147	1-146 and 148-8376
148	1-147 and 149-8376
149	1-148 and 150-8376
150	1-149 and 151-8376
151	1-150 and 152-8376
152	1-151 and 153-8376
153	1-152 and 154-8376
154	1-153 and 155-8376
155	1-154 and 156-8376
156	1-155 and 157-8376
157	1-156 and 158-8376
158	1-157 and 159-8376
159	1-158 and 160-8376
160	1-159 and 161-8376
161	1-160 and 162-8376
162	1-161 and 163-8376
163	1-162 and 164-8376
164	1-163 and 165-8376
165	1-164 and 166-8376
166	1-165 and 167-8376
167	1-166 and 168-8376
168	1-167 and 169-8376
169	1-168 and 170-8376
170	1-169 and 171-8376
171	1-170 and 172-8376
172	1-171 and 173-8376
173	1-172 and 174-8376
174	1-173 and 175-8376
175	1-174 and 176-8376
176	1-175 and 177-8376
177	1-176 and 178-8376
178	1-177 and 179-8376
179	1-178 and 180-8376
180	1-179 and 181-8376
181	1-180 and 182-8376
182	1-181 and 183-8376
183	1-182 and 184-8376
184	1-183 and 185-8376
185	1-184 and 186-8376

186	1-185 and 187-8376
187	1-186 and 188-8376
188	1-187 and 189-8376
189	1-188 and 190-8376
190	1-189 and 191-8376
191	1-190 and 192-8376
192	1-191 and 193-8376
193	1-192 and 194-8376
194	1-193 and 195-8376
195	1-194 and 196-8376
196	1-195 and 197-8376
197	1-196 and 198-8376
198	1-197 and 199-8376
199	1-198 and 200-8376
200	1-199 and 201-8376
201	1-200 and 202-8376
202	1-201 and 203-8376
203	1-202 and 204-8376
204	1-203 and 205-8376
205	1-204 and 206-8376
206	1-205 and 207-8376
207	1-206 and 208-8376
208	1-207 and 209-8376
209	1-208 and 210-8376
210	1-209 and 211-8376
211	1-210 and 212-8376
212	1-211 and 213-8376
213	1-212 and 214-8376
214	1-213 and 215-8376
215	1-214 and 216-8376
216	1-215 and 217-8376
217	1-216 and 218-8376
218	1-217 and 219-8376
219	1-218 and 220-8376
220	1-219 and 221-8376
221	1-220 and 222-8376
222	1-221 and 223-8376
223	1-222 and 224-8376
224	1-223 and 225-8376
225	1-224 and 226-8376
226	1-225 and 227-8376
227	1-226 and 228-8376
228	1-227 and 229-8376
229	1-228 and 230-8376
230	1-229 and 231-8376
231	1-230 and 232-8376
232	1-231 and 233-8376
233	1-232 and 234-8376
234	1-233 and 235-8376
235	1-234 and 236-8376
236	1-235 and 237-8376
237	1-236 and 238-8376
238	1-237 and 239-8376
239	1-238 and 240-8376
240	1-239 and 241-8376
241	1-240 and 242-8376
242	1-241 and 243-8376

243	1-242 and 244-8376	300	1-299 and 301-8376	357	1-356 and 358-8376
244	1-243 and 245-8376	301	1-300 and 302-8376	358	1-357 and 359-8376
245	1-244 and 246-8376	302	1-301 and 303-8376	359	1-358 and 360-8376
246	1-245 and 247-8376	303	1-302 and 304-8376	360	1-359 and 361-8376
247	1-246 and 248-8376	304	1-303 and 305-8376	361	1-360 and 362-8376
248	1-247 and 249-8376	305	1-304 and 306-8376	362	1-361 and 363-8376
249	1-248 and 250-8376	306	1-305 and 307-8376	363	1-362 and 364-8376
250	1-249 and 251-8376	307	1-306 and 308-8376	364	1-363 and 365-8376
251	1-250 and 252-8376	308	1-307 and 309-8376	365	1-364 and 366-8376
252	1-251 and 253-8376	309	1-308 and 310-8376	366	1-365 and 367-8376
253	1-252 and 254-8376	310	1-309 and 311-8376	367	1-366 and 368-8376
254	1-253 and 255-8376	311	1-310 and 312-8376	368	1-367 and 369-8376
255	1-254 and 256-8376	312	1-311 and 313-8376	369	1-368 and 370-8376
256	1-255 and 257-8376	313	1-312 and 314-8376	370	1-369 and 371-8376
257	1-256 and 258-8376	314	1-313 and 315-8376	371	1-370 and 372-8376
258	1-257 and 259-8376	315	1-314 and 316-8376	372	1-371 and 373-8376
259	1-258 and 260-8376	316	1-315 and 317-8376	373	1-372 and 374-8376
260	1-259 and 261-8376	317	1-316 and 318-8376	374	1-373 and 375-8376
261	1-260 and 262-8376	318	1-317 and 319-8376	375	1-374 and 376-8376
262	1-261 and 263-8376	319	1-318 and 320-8376	376	1-375 and 377-8376
263	1-262 and 264-8376	320	1-319 and 321-8376	377	1-376 and 378-8376
264	1-263 and 265-8376	321	1-320 and 322-8376	378	1-377 and 379-8376
265	1-264 and 266-8376	322	1-321 and 323-8376	379	1-378 and 380-8376
266	1-265 and 267-8376	323	1-322 and 324-8376	380	1-379 and 381-8376
267	1-266 and 268-8376	324	1-323 and 325-8376	381	1-380 and 382-8376
268	1-267 and 269-8376	325	1-324 and 326-8376	382	1-381 and 383-8376
269	1-268 and 270-8376	326	1-325 and 327-8376	383	1-382 and 384-8376
270	1-269 and 271-8376	327	1-326 and 328-8376	384	1-383 and 385-8376
271	1-270 and 272-8376	328	1-327 and 329-8376	385	1-384 and 386-8376
272	1-271 and 273-8376	329	1-328 and 330-8376	386	1-385 and 387-8376
273	1-272 and 274-8376	330	1-329 and 331-8376	387	1-386 and 388-8376
274	1-273 and 275-8376	331	1-330 and 332-8376	388	1-387 and 389-8376
275	1-274 and 276-8376	332	1-331 and 333-8376	389	1-388 and 390-8376
276	1-275 and 277-8376	333	1-332 and 334-8376	390	1-389 and 391-8376
277	1-276 and 278-8376	334	1-333 and 335-8376	391	1-390 and 392-8376
278	1-277 and 279-8376	335	1-334 and 336-8376	392	1-391 and 393-8376
279	1-278 and 280-8376	336	1-335 and 337-8376	393	1-392 and 394-8376
280	1-279 and 281-8376	337	1-336 and 338-8376	394	1-393 and 395-8376
281	1-280 and 282-8376	338	1-337 and 339-8376	395	1-394 and 396-8376
282	1-281 and 283-8376	339	1-338 and 340-8376	396	1-395 and 397-8376
283	1-282 and 284-8376	340	1-339 and 341-8376	397	1-396 and 398-8376
284	1-283 and 285-8376	341	1-340 and 342-8376	398	1-397 and 399-8376
285	1-284 and 286-8376	342	1-341 and 343-8376	399	1-398 and 400-8376
286	1-285 and 287-8376	343	1-342 and 344-8376	400	1-399 and 401-8376
287	1-286 and 288-8376	344	1-343 and 345-8376	401	1-400 and 402-8376
288	1-287 and 289-8376	345	1-344 and 346-8376	402	1-401 and 403-8376
289	1-288 and 290-8376	346	1-345 and 347-8376	403	1-402 and 404-8376
290	1-289 and 291-8376	347	1-346 and 348-8376	404	1-403 and 405-8376
291	1-290 and 292-8376	348	1-347 and 349-8376	405	1-404 and 406-8376
292	1-291 and 293-8376	349	1-348 and 350-8376	406	1-405 and 407-8376
293	1-292 and 294-8376	350	1-349 and 351-8376	407	1-406 and 408-8376
294	1-293 and 295-8376	351	1-350 and 352-8376	408	1-407 and 409-8376
295	1-294 and 296-8376	352	1-351 and 353-8376	409	1-408 and 410-8376
296	1-295 and 297-8376	353	1-352 and 354-8376	410	1-409 and 411-8376
297	1-296 and 298-8376	354	1-353 and 355-8376	411	1-410 and 412-8376
298	1-297 and 299-8376	355	1-354 and 356-8376	412	1-411 and 413-8376
299	1-298 and 300-8376	356	1-355 and 357-8376	413	1-412 and 414-8376



414	1-413 and 415-8376
415	1-414 and 416-8376
416	1-415 and 417-8376
417	1-416 and 418-8376
418	1-417 and 419-8376
419	1-418 and 420-8376
420	1-419 and 421-8376
421	1-420 and 422-8376
422	1-421 and 423-8376
423	1-422 and 424-8376
424	1-423 and 425-8376
425	1-424 and 426-8376
426	1-425 and 427-8376
427	1-426 and 428-8376
428	1-427 and 429-8376
429	1-428 and 430-8376
430	1-429 and 431-8376
431	1-430 and 432-8376
432	1-431 and 433-8376
433	1-432 and 434-8376
434	1-433 and 435-8376
435	1-434 and 436-8376
436	1-435 and 437-8376
437	1-436 and 438-8376
438	1-437 and 439-8376
439	1-438 and 440-8376
440	1-439 and 441-8376
441	1-440 and 442-8376
442	1-441 and 443-8376
443	1-442 and 444-8376
444	1-443 and 445-8376
445	1-444 and 446-8376
446	1-445 and 447-8376
447	1-446 and 448-8376
448	1-447 and 449-8376
449	1-448 and 450-8376
450	1-449 and 451-8376
451	1-450 and 452-8376
452	1-451 and 453-8376
453	1-452 and 454-8376
454	1-453 and 455-8376
455	1-454 and 456-8376
456	1-455 and 457-8376
457	1-456 and 458-8376
458	1-457 and 459-8376
459	1-458 and 460-8376
460	1-459 and 461-8376
461	1-460 and 462-8376
462	1-461 and 463-8376
463	1-462 and 464-8376
464	1-463 and 465-8376
465	1-464 and 466-8376
466	1-465 and 467-8376
467	1-466 and 468-8376
468	1-467 and 469-8376
469	1-468 and 470-8376
470	1-469 and 471-8376

471	1-470 and 472-8376
472	1-471 and 473-8376
473	1-472 and 474-8376
474	1-473 and 475-8376
475	1-474 and 476-8376
476	1-475 and 477-8376
477	1-476 and 478-8376
478	1-477 and 479-8376
479	1-478 and 480-8376
480	1-479 and 481-8376
481	1-480 and 482-8376
482	1-481 and 483-8376
483	1-482 and 484-8376
484	1-483 and 485-8376
485	1-484 and 486-8376
486	1-485 and 487-8376
487	1-486 and 488-8376
488	1-487 and 489-8376
489	1-488 and 490-8376
490	1-489 and 491-8376
491	1-490 and 492-8376
492	1-491 and 493-8376
493	1-492 and 494-8376
494	1-493 and 495-8376
495	1-494 and 496-8376
496	1-495 and 497-8376
497	1-496 and 498-8376
498	1-497 and 499-8376
499	1-498 and 500-8376
500	1-499 and 501-8376
501	1-500 and 502-8376
502	1-501 and 503-8376
503	1-502 and 504-8376
504	1-503 and 505-8376
505	1-504 and 506-8376
506	1-505 and 507-8376
507	1-506 and 508-8376
508	1-507 and 509-8376
509	1-508 and 510-8376
510	1-509 and 511-8376
511	1-510 and 512-8376
512	1-511 and 513-8376
513	1-512 and 514-8376
514	1-513 and 515-8376
515	1-514 and 516-8376
516	1-515 and 517-8376
517	1-516 and 518-8376
518	1-517 and 519-8376
519	1-518 and 520-8376
520	1-519 and 521-8376
521	1-520 and 522-8376
522	1-521 and 523-8376
523	1-522 and 524-8376
524	1-523 and 525-8376
525	1-524 and 526-8376
526	1-525 and 527-8376
527	1-526 and 528-8376

528	1-527 and 529-8376
529	1-528 and 530-8376
530	1-529 and 531-8376
531	1-530 and 532-8376
532	1-531 and 533-8376
533	1-532 and 534-8376
534	1-533 and 535-8376
535	1-534 and 536-8376
536	1-535 and 537-8376
537	1-536 and 538-8376
538	1-537 and 539-8376
539	1-538 and 540-8376
540	1-539 and 541-8376
541	1-540 and 542-8376
542	1-541 and 543-8376
543	1-542 and 544-8376
544	1-543 and 545-8376
545	1-544 and 546-8376
546	1-545 and 547-8376
547	1-546 and 548-8376
548	1-547 and 549-8376
549	1-548 and 550-8376
550	1-549 and 551-8376
551	1-550 and 552-8376
552	1-551 and 553-8376
553	1-552 and 554-8376
554	1-553 and 555-8376
555	1-554 and 556-8376
556	1-555 and 557-8376
557	1-556 and 558-8376
558	1-557 and 559-8376
559	1-558 and 560-8376
560	1-559 and 561-8376
561	1-560 and 562-8376
562	1-561 and 563-8376
563	1-562 and 564-8376
564	1-563 and 565-8376
565	1-564 and 566-8376
566	1-565 and 567-8376
567	1-566 and 568-8376
568	1-567 and 569-8376
569	1-568 and 570-8376
570	1-569 and 571-8376
571	1-570 and 572-8376
572	1-571 and 573-8376
573	1-572 and 574-8376
574	1-573 and 575-8376
575	1-574 and 576-8376
576	1-575 and 577-8376
577	1-576 and 578-8376
578	1-577 and 579-8376
579	1-578 and 580-8376
580	1-579 and 581-8376
581	1-580 and 582-8376
582	1-581 and 583-8376
583	1-582 and 584-8376
584	1-583 and 585-8376

585	1-584 and 586-8376
586	1-585 and 587-8376
587	1-586 and 588-8376
588	1-587 and 589-8376
589	1-588 and 590-8376
590	1-589 and 591-8376
591	1-590 and 592-8376
592	1-591 and 593-8376
593	1-592 and 594-8376
594	1-593 and 595-8376
595	1-594 and 596-8376
596	1-595 and 597-8376
597	1-596 and 598-8376
598	1-597 and 599-8376
599	1-598 and 600-8376
600	1-599 and 601-8376
601	1-600 and 602-8376
602	1-601 and 603-8376
603	1-602 and 604-8376
604	1-603 and 605-8376
605	1-604 and 606-8376
606	1-605 and 607-8376
607	1-606 and 608-8376
608	1-607 and 609-8376
609	1-608 and 610-8376
610	1-609 and 611-8376
611	1-610 and 612-8376
612	1-611 and 613-8376
613	1-612 and 614-8376
614	1-613 and 615-8376
615	1-614 and 616-8376
616	1-615 and 617-8376
617	1-616 and 618-8376
618	1-617 and 619-8376
619	1-618 and 620-8376
620	1-619 and 621-8376
621	1-620 and 622-8376
622	1-621 and 623-8376
623	1-622 and 624-8376
624	1-623 and 625-8376
625	1-624 and 626-8376
626	1-625 and 627-8376
627	1-626 and 628-8376
628	1-627 and 629-8376
629	1-628 and 630-8376
630	1-629 and 631-8376
631	1-630 and 632-8376
632	1-631 and 633-8376
633	1-632 and 634-8376
634	1-633 and 635-8376
635	1-634 and 636-8376
636	1-635 and 637-8376
637	1-636 and 638-8376
638	1-637 and 639-8376
639	1-638 and 640-8376
640	1-639 and 641-8376
641	1-640 and 642-8376

642	1-641 and 643-8376
643	1-642 and 644-8376
644	1-643 and 645-8376
645	1-644 and 646-8376
646	1-645 and 647-8376
647	1-646 and 648-8376
648	1-647 and 649-8376
649	1-648 and 650-8376
650	1-649 and 651-8376
651	1-650 and 652-8376
652	1-651 and 653-8376
653	1-652 and 654-8376
654	1-653 and 655-8376
655	1-654 and 656-8376
656	1-655 and 657-8376
657	1-656 and 658-8376
658	1-657 and 659-8376
659	1-658 and 660-8376
660	1-659 and 661-8376
661	1-660 and 662-8376
662	1-661 and 663-8376
663	1-662 and 664-8376
664	1-663 and 665-8376
665	1-664 and 666-8376
666	1-665 and 667-8376
667	1-666 and 668-8376
668	1-667 and 669-8376
669	1-668 and 670-8376
670	1-669 and 671-8376
671	1-670 and 672-8376
672	1-671 and 673-8376
673	1-672 and 674-8376
674	1-673 and 675-8376
675	1-674 and 676-8376
676	1-675 and 677-8376
677	1-676 and 678-8376
678	1-677 and 679-8376
679	1-678 and 680-8376
680	1-679 and 681-8376
681	1-680 and 682-8376
682	1-681 and 683-8376
683	1-682 and 684-8376
684	1-683 and 685-8376
685	1-684 and 686-8376
686	1-685 and 687-8376
687	1-686 and 688-8376
688	1-687 and 689-8376
689	1-688 and 690-8376
690	1-689 and 691-8376
691	1-690 and 692-8376
692	1-691 and 693-8376
693	1-692 and 694-8376
694	1-693 and 695-8376
695	1-694 and 696-8376
696	1-695 and 697-8376
697	1-696 and 698-8376
698	1-697 and 699-8376

699	1-698 and 700-8376
700	1-699 and 701-8376
701	1-700 and 702-8376
702	1-701 and 703-8376
703	1-702 and 704-8376
704	1-703 and 705-8376
705	1-704 and 706-8376
706	1-705 and 707-8376
707	1-706 and 708-8376
708	1-707 and 709-8376
709	1-708 and 710-8376
710	1-709 and 711-8376
711	1-710 and 712-8376
712	1-711 and 713-8376
713	1-712 and 714-8376
714	1-713 and 715-8376
715	1-714 and 716-8376
716	1-715 and 717-8376
717	1-716 and 718-8376
718	1-717 and 719-8376
719	1-718 and 720-8376
720	1-719 and 721-8376
721	1-720 and 722-8376
722	1-721 and 723-8376
723	1-722 and 724-8376
724	1-723 and 725-8376
725	1-724 and 726-8376
726	1-725 and 727-8376
727	1-726 and 728-8376
728	1-727 and 729-8376
729	1-728 and 730-8376
730	1-729 and 731-8376
731	1-730 and 732-8376
732	1-731 and 733-8376
733	1-732 and 734-8376
734	1-733 and 735-8376
735	1-734 and 736-8376
736	1-735 and 737-8376
737	1-736 and 738-8376
738	1-737 and 739-8376
739	1-738 and 740-8376
740	1-739 and 741-8376
741	1-740 and 742-8376
742	1-741 and 743-8376
743	1-742 and 744-8376
744	1-743 and 745-8376
745	1-744 and 746-8376
746	1-745 and 747-8376
747	1-746 and 748-8376
748	1-747 and 749-8376
749	1-748 and 750-8376
750	1-749 and 751-8376
751	1-750 and 752-8376
752	1-751 and 753-8376
753	1-752 and 754-8376
754	1-753 and 755-8376
755	1-754 and 756-8376

756	1-755 and 757-8376
757	1-756 and 758-8376
758	1-757 and 759-8376
759	1-758 and 760-8376
760	1-759 and 761-8376
761	1-760 and 762-8376
762	1-761 and 763-8376
763	1-762 and 764-8376
764	1-763 and 765-8376
765	1-764 and 766-8376
766	1-765 and 767-8376
767	1-766 and 768-8376
768	1-767 and 769-8376
769	1-768 and 770-8376
770	1-769 and 771-8376
771	1-770 and 772-8376
772	1-771 and 773-8376
773	1-772 and 774-8376
774	1-773 and 775-8376
775	1-774 and 776-8376
776	1-775 and 777-8376
777	1-776 and 778-8376
778	1-777 and 779-8376
779	1-778 and 780-8376
780	1-779 and 781-8376
781	1-780 and 782-8376
782	1-781 and 783-8376
783	1-782 and 784-8376
784	1-783 and 785-8376
785	1-784 and 786-8376
786	1-785 and 787-8376
787	1-786 and 788-8376
788	1-787 and 789-8376
789	1-788 and 790-8376
790	1-789 and 791-8376
791	1-790 and 792-8376
792	1-791 and 793-8376
793	1-792 and 794-8376
794	1-793 and 795-8376
795	1-794 and 796-8376
796	1-795 and 797-8376
797	1-796 and 798-8376
798	1-797 and 799-8376
799	1-798 and 800-8376
800	1-799 and 801-8376
801	1-800 and 802-8376
802	1-801 and 803-8376
803	1-802 and 804-8376
804	1-803 and 805-8376
805	1-804 and 806-8376
806	1-805 and 807-8376
807	1-806 and 808-8376
808	1-807 and 809-8376
809	1-808 and 810-8376
810	1-809 and 811-8376
811	1-810 and 812-8376
812	1-811 and 813-8376

813	1-812 and 814-8376
814	1-813 and 815-8376
815	1-814 and 816-8376
816	1-815 and 817-8376
817	1-816 and 818-8376
818	1-817 and 819-8376
819	1-818 and 820-8376
820	1-819 and 821-8376
821	1-820 and 822-8376
822	1-821 and 823-8376
823	1-822 and 824-8376
824	1-823 and 825-8376
825	1-824 and 826-8376
826	1-825 and 827-8376
827	1-826 and 828-8376
828	1-827 and 829-8376
829	1-828 and 830-8376
830	1-829 and 831-8376
831	1-830 and 832-8376
832	1-831 and 833-8376
833	1-832 and 834-8376
834	1-833 and 835-8376
835	1-834 and 836-8376
836	1-835 and 837-8376
837	1-836 and 838-8376
838	1-837 and 839-8376
839	1-838 and 840-8376
840	1-839 and 841-8376
841	1-840 and 842-8376
842	1-841 and 843-8376
843	1-842 and 844-8376
844	1-843 and 845-8376
845	1-844 and 846-8376
846	1-845 and 847-8376
847	1-846 and 848-8376
848	1-847 and 849-8376
849	1-848 and 850-8376
850	1-849 and 851-8376
851	1-850 and 852-8376
852	1-851 and 853-8376
853	1-852 and 854-8376
854	1-853 and 855-8376
855	1-854 and 856-8376
856	1-855 and 857-8376
857	1-856 and 858-8376
858	1-857 and 859-8376
859	1-858 and 860-8376
860	1-859 and 861-8376
861	1-860 and 862-8376
862	1-861 and 863-8376
863	1-862 and 864-8376
864	1-863 and 865-8376
865	1-864 and 866-8376
866	1-865 and 867-8376
867	1-866 and 868-8376
868	1-867 and 869-8376
869	1-868 and 870-8376

870	1-869 and 871-8376
871	1-870 and 872-8376
872	1-871 and 873-8376
873	1-872 and 874-8376
874	1-873 and 875-8376
875	1-874 and 876-8376
876	1-875 and 877-8376
877	1-876 and 878-8376
878	1-877 and 879-8376
879	1-878 and 880-8376
880	1-879 and 881-8376
881	1-880 and 882-8376
882	1-881 and 883-8376
883	1-882 and 884-8376
884	1-883 and 885-8376
885	1-884 and 886-8376
886	1-885 and 887-8376
887	1-886 and 888-8376
888	1-887 and 889-8376
889	1-888 and 890-8376
890	1-889 and 891-8376
891	1-890 and 892-8376
892	1-891 and 893-8376
893	1-892 and 894-8376
894	1-893 and 895-8376
895	1-894 and 896-8376
896	1-895 and 897-8376
897	1-896 and 898-8376
898	1-897 and 899-8376
899	1-898 and 900-8376
900	1-899 and 901-8376
901	1-900 and 902-8376
902	1-901 and 903-8376
903	1-902 and 904-8376
904	1-903 and 905-8376
905	1-904 and 906-8376
906	1-905 and 907-8376
907	1-906 and 908-8376
908	1-907 and 909-8376
909	1-908 and 910-8376
910	1-909 and 911-8376
911	1-910 and 912-8376
912	1-911 and 913-8376
913	1-912 and 914-8376
914	1-913 and 915-8376
915	1-914 and 916-8376
916	1-915 and 917-8376
917	1-916 and 918-8376
918	1-917 and 919-8376
919	1-918 and 920-8376
920	1-919 and 921-8376
921	1-920 and 922-8376
922	1-921 and 923-8376
923	1-922 and 924-8376
924	1-923 and 925-8376
925	1-924 and 926-8376
926	1-925 and 927-8376

927	1-926 and 928-8376
928	1-927 and 929-8376
929	1-928 and 930-8376
930	1-929 and 931-8376
931	1-930 and 932-8376
932	1-931 and 933-8376
933	1-932 and 934-8376
934	1-933 and 935-8376
935	1-934 and 936-8376
936	1-935 and 937-8376
937	1-936 and 938-8376
938	1-937 and 939-8376
939	1-938 and 940-8376
940	1-939 and 941-8376
941	1-940 and 942-8376
942	1-941 and 943-8376
943	1-942 and 944-8376
944	1-943 and 945-8376
945	1-944 and 946-8376
946	1-945 and 947-8376
947	1-946 and 948-8376
948	1-947 and 949-8376
949	1-948 and 950-8376
950	1-949 and 951-8376
951	1-950 and 952-8376
952	1-951 and 953-8376
953	1-952 and 954-8376
954	1-953 and 955-8376
955	1-954 and 956-8376
956	1-955 and 957-8376
957	1-956 and 958-8376
958	1-957 and 959-8376
959	1-958 and 960-8376
960	1-959 and 961-8376
961	1-960 and 962-8376
962	1-961 and 963-8376
963	1-962 and 964-8376
964	1-963 and 965-8376
965	1-964 and 966-8376
966	1-965 and 967-8376
967	1-966 and 968-8376
968	1-967 and 969-8376
969	1-968 and 970-8376
970	1-969 and 971-8376
971	1-970 and 972-8376
972	1-971 and 973-8376
973	1-972 and 974-8376
974	1-973 and 975-8376
975	1-974 and 976-8376
976	1-975 and 977-8376
977	1-976 and 978-8376
978	1-977 and 979-8376
979	1-978 and 980-8376
980	1-979 and 981-8376
981	1-980 and 982-8376
982	1-981 and 983-8376
983	1-982 and 984-8376

984	1-983 and 985-8376
985	1-984 and 986-8376
986	1-985 and 987-8376
987	1-986 and 988-8376
988	1-987 and 989-8376
989	1-988 and 990-8376
990	1-989 and 991-8376
991	1-990 and 992-8376
992	1-991 and 993-8376
993	1-992 and 994-8376
994	1-993 and 995-8376
995	1-994 and 996-8376
996	1-995 and 997-8376
997	1-996 and 998-8376
998	1-997 and 999-8376
999	1-998 and 1000-8376
1000	1-999 and 1001-8376
1001	1-1000 and 1002-8376
1002	1-1001 and 1003-8376
1003	1-1002 and 1004-8376
1004	1-1003 and 1005-8376
1005	1-1004 and 1006-8376
1006	1-1005 and 1007-8376
1007	1-1006 and 1008-8376
1008	1-1007 and 1009-8376
1009	1-1008 and 1010-8376
1010	1-1009 and 1011-8376
1011	1-1010 and 1012-8376
1012	1-1011 and 1013-8376
1013	1-1012 and 1014-8376
1014	1-1013 and 1015-8376
1015	1-1014 and 1016-8376
1016	1-1015 and 1017-8376
1017	1-1016 and 1018-8376
1018	1-1017 and 1019-8376
1019	1-1018 and 1020-8376
1020	1-1019 and 1021-8376
1021	1-1020 and 1022-8376
1022	1-1021 and 1023-8376
1023	1-1022 and 1024-8376
1024	1-1023 and 1025-8376
1025	1-1024 and 1026-8376
1026	1-1025 and 1027-8376
1027	1-1026 and 1028-8376
1028	1-1027 and 1029-8376
1029	1-1028 and 1030-8376
1030	1-1029 and 1031-8376
1031	1-1030 and 1032-8376
1032	1-1031 and 1033-8376
1033	1-1032 and 1034-8376
1034	1-1033 and 1035-8376
1035	1-1034 and 1036-8376
1036	1-1035 and 1037-8376
1037	1-1036 and 1038-8376
1038	1-1037 and 1039-8376
1039	1-1038 and 1040-8376
1040	1-1039 and 1041-8376

1041	1-1040 and 1042-8376
1042	1-1041 and 1043-8376
1043	1-1042 and 1044-8376
1044	1-1043 and 1045-8376
1045	1-1044 and 1046-8376
1046	1-1045 and 1047-8376
1047	1-1046 and 1048-8376
1048	1-1047 and 1049-8376
1049	1-1048 and 1050-8376
1050	1-1049 and 1051-8376
1051	1-1050 and 1052-8376
1052	1-1051 and 1053-8376
1053	1-1052 and 1054-8376
1054	1-1053 and 1055-8376
1055	1-1054 and 1056-8376
1056	1-1055 and 1057-8376
1057	1-1056 and 1058-8376
1058	1-1057 and 1059-8376
1059	1-1058 and 1060-8376
1060	1-1059 and 1061-8376
1061	1-1060 and 1062-8376
1062	1-1061 and 1063-8376
1063	1-1062 and 1064-8376
1064	1-1063 and 1065-8376
1065	1-1064 and 1066-8376
1066	1-1065 and 1067-8376
1067	1-1066 and 1068-8376
1068	1-1067 and 1069-8376
1069	1-1068 and 1070-8376
1070	1-1069 and 1071-8376
1071	1-1070 and 1072-8376
1072	1-1071 and 1073-8376
1073	1-1072 and 1074-8376
1074	1-1073 and 1075-8376
1075	1-1074 and 1076-8376
1076	1-1075 and 1077-8376
1077	1-1076 and 1078-8376
1078	1-1077 and 1079-8376
1079	1-1078 and 1080-8376
1080	1-1079 and 1081-8376
1081	1-1080 and 1082-8376
1082	1-1081 and 1083-8376
1083	1-1082 and 1084-8376
1084	1-1083 and 1085-8376
1085	1-1084 and 1086-8376
1086	1-1085 and 1087-8376
1087	1-1086 and 1088-8376
1088	1-1087 and 1089-8376
1089	1-1088 and 1090-8376
1090	1-1089 and 1091-8376
1091	1-1090 and 1092-8376
1092	1-1091 and 1093-8376
1093	1-1092 and 1094-8376
1094	1-1093 and 1095-8376
1095	1-1094 and 1096-8376
1096	1-1095 and 1097-8376
1097	1-1096 and 1098-8376

1098	1-1097 and 1099-8376
1099	1-1098 and 1100-8376
1100	1-1099 and 1101-8376
1101	1-1100 and 1102-8376
1102	1-1101 and 1103-8376
1103	1-1102 and 1104-8376
1104	1-1103 and 1105-8376
1105	1-1104 and 1106-8376
1106	1-1105 and 1107-8376
1107	1-1106 and 1108-8376
1108	1-1107 and 1109-8376
1109	1-1108 and 1110-8376
1110	1-1109 and 1111-8376
1111	1-1110 and 1112-8376
1112	1-1111 and 1113-8376
1113	1-1112 and 1114-8376
1114	1-1113 and 1115-8376
1115	1-1114 and 1116-8376
1116	1-1115 and 1117-8376
1117	1-1116 and 1118-8376
1118	1-1117 and 1119-8376
1119	1-1118 and 1120-8376
1120	1-1119 and 1121-8376
1121	1-1120 and 1122-8376
1122	1-1121 and 1123-8376
1123	1-1122 and 1124-8376
1124	1-1123 and 1125-8376
1125	1-1124 and 1126-8376
1126	1-1125 and 1127-8376
1127	1-1126 and 1128-8376
1128	1-1127 and 1129-8376
1129	1-1128 and 1130-8376
1130	1-1129 and 1131-8376
1131	1-1130 and 1132-8376
1132	1-1131 and 1133-8376
1133	1-1132 and 1134-8376
1134	1-1133 and 1135-8376
1135	1-1134 and 1136-8376
1136	1-1135 and 1137-8376
1137	1-1136 and 1138-8376
1138	1-1137 and 1139-8376
1139	1-1138 and 1140-8376
1140	1-1139 and 1141-8376
1141	1-1140 and 1142-8376
1142	1-1141 and 1143-8376
1143	1-1142 and 1144-8376
1144	1-1143 and 1145-8376
1145	1-1144 and 1146-8376
1146	1-1145 and 1147-8376
1147	1-1146 and 1148-8376
1148	1-1147 and 1149-8376
1149	1-1148 and 1150-8376
1150	1-1149 and 1151-8376
1151	1-1150 and 1152-8376
1152	1-1151 and 1153-8376
1153	1-1152 and 1154-8376
1154	1-1153 and 1155-8376

1155	1-1154 and 1156-8376
1156	1-1155 and 1157-8376
1157	1-1156 and 1158-8376
1158	1-1157 and 1159-8376
1159	1-1158 and 1160-8376
1160	1-1159 and 1161-8376
1161	1-1160 and 1162-8376
1162	1-1161 and 1163-8376
1163	1-1162 and 1164-8376
1164	1-1163 and 1165-8376
1165	1-1164 and 1166-8376
1166	1-1165 and 1167-8376
1167	1-1166 and 1168-8376
1168	1-1167 and 1169-8376
1169	1-1168 and 1170-8376
1170	1-1169 and 1171-8376
1171	1-1170 and 1172-8376
1172	1-1171 and 1173-8376
1173	1-1172 and 1174-8376
1174	1-1173 and 1175-8376
1175	1-1174 and 1176-8376
1176	1-1175 and 1177-8376
1177	1-1176 and 1178-8376
1178	1-1177 and 1179-8376
1179	1-1178 and 1180-8376
1180	1-1179 and 1181-8376
1181	1-1180 and 1182-8376
1182	1-1181 and 1183-8376
1183	1-1182 and 1184-8376
1184	1-1183 and 1185-8376
1185	1-1184 and 1186-8376
1186	1-1185 and 1187-8376
1187	1-1186 and 1188-8376
1188	1-1187 and 1189-8376
1189	1-1188 and 1190-8376
1190	1-1189 and 1191-8376
1191	1-1190 and 1192-8376
1192	1-1191 and 1193-8376
1193	1-1192 and 1194-8376
1194	1-1193 and 1195-8376
1195	1-1194 and 1196-8376
1196	1-1195 and 1197-8376
1197	1-1196 and 1198-8376
1198	1-1197 and 1199-8376
1199	1-1198 and 1200-8376
1200	1-1199 and 1201-8376
1201	1-1200 and 1202-8376
1202	1-1201 and 1203-8376
1203	1-1202 and 1204-8376
1204	1-1203 and 1205-8376
1205	1-1204 and 1206-8376
1206	1-1205 and 1207-8376
1207	1-1206 and 1208-8376
1208	1-1207 and 1209-8376
1209	1-1208 and 1210-8376
1210	1-1209 and 1211-8376
1211	1-1210 and 1212-8376

1212	1-1211 and 1213-8376
1213	1-1212 and 1214-8376
1214	1-1213 and 1215-8376
1215	1-1214 and 1216-8376
1216	1-1215 and 1217-8376
1217	1-1216 and 1218-8376
1218	1-1217 and 1219-8376
1219	1-1218 and 1220-8376
1220	1-1219 and 1221-8376
1221	1-1220 and 1222-8376
1222	1-1221 and 1223-8376
1223	1-1222 and 1224-8376
1224	1-1223 and 1225-8376
1225	1-1224 and 1226-8376
1226	1-1225 and 1227-8376
1227	1-1226 and 1228-8376
1228	1-1227 and 1229-8376
1229	1-1228 and 1230-8376
1230	1-1229 and 1231-8376
1231	1-1230 and 1232-8376
1232	1-1231 and 1233-8376
1233	1-1232 and 1234-8376
1234	1-1233 and 1235-8376
1235	1-1234 and 1236-8376
1236	1-1235 and 1237-8376
1237	1-1236 and 1238-8376
1238	1-1237 and 1239-8376
1239	1-1238 and 1240-8376
1240	1-1239 and 1241-8376
1241	1-1240 and 1242-8376
1242	1-1241 and 1243-8376
1243	1-1242 and 1244-8376
1244	1-1243 and 1245-8376
1245	1-1244 and 1246-8376
1246	1-1245 and 1247-8376
1247	1-1246 and 1248-8376
1248	1-1247 and 1249-8376
1249	1-1248 and 1250-8376
1250	1-1249 and 1251-8376
1251	1-1250 and 1252-8376
1252	1-1251 and 1253-8376
1253	1-1252 and 1254-8376
1254	1-1253 and 1255-8376
1255	1-1254 and 1256-8376
1256	1-1255 and 1257-8376
1257	1-1256 and 1258-8376
1258	1-1257 and 1259-8376
1259	1-1258 and 1260-8376
1260	1-1259 and 1261-8376
1261	1-1260 and 1262-8376
1262	1-1261 and 1263-8376
1263	1-1262 and 1264-8376
1264	1-1263 and 1265-8376
1265	1-1264 and 1266-8376
1266	1-1265 and 1267-8376
1267	1-1266 and 1268-8376
1268	1-1267 and 1269-8376

1269	1-1268 and 1270-8376
1270	1-1269 and 1271-8376
1271	1-1270 and 1272-8376
1272	1-1271 and 1273-8376
1273	1-1272 and 1274-8376
1274	1-1273 and 1275-8376
1275	1-1274 and 1276-8376
1276	1-1275 and 1277-8376
1277	1-1276 and 1278-8376
1278	1-1277 and 1279-8376
1279	1-1278 and 1280-8376
1280	1-1279 and 1281-8376
1281	1-1280 and 1282-8376
1282	1-1281 and 1283-8376
1283	1-1282 and 1284-8376
1284	1-1283 and 1285-8376
1285	1-1284 and 1286-8376
1286	1-1285 and 1287-8376
1287	1-1286 and 1288-8376
1288	1-1287 and 1289-8376
1289	1-1288 and 1290-8376
1290	1-1289 and 1291-8376
1291	1-1290 and 1292-8376
1292	1-1291 and 1293-8376
1293	1-1292 and 1294-8376
1294	1-1293 and 1295-8376
1295	1-1294 and 1296-8376
1296	1-1295 and 1297-8376
1297	1-1296 and 1298-8376
1298	1-1297 and 1299-8376
1299	1-1298 and 1300-8376
1300	1-1299 and 1301-8376
1301	1-1300 and 1302-8376
1302	1-1301 and 1303-8376
1303	1-1302 and 1304-8376
1304	1-1303 and 1305-8376
1305	1-1304 and 1306-8376
1306	1-1305 and 1307-8376
1307	1-1306 and 1308-8376
1308	1-1307 and 1309-8376
1309	1-1308 and 1310-8376
1310	1-1309 and 1311-8376
1311	1-1310 and 1312-8376
1312	1-1311 and 1313-8376
1313	1-1312 and 1314-8376
1314	1-1313 and 1315-8376
1315	1-1314 and 1316-8376
1316	1-1315 and 1317-8376
1317	1-1316 and 1318-8376
1318	1-1317 and 1319-8376
1319	1-1318 and 1320-8376
1320	1-1319 and 1321-8376
1321	1-1320 and 1322-8376
1322	1-1321 and 1323-8376
1323	1-1322 and 1324-8376
1324	1-1323 and 1325-8376
1325	1-1324 and 1326-8376

1326	1-1325 and 1327-8376
1327	1-1326 and 1328-8376
1328	1-1327 and 1329-8376
1329	1-1328 and 1330-8376
1330	1-1329 and 1331-8376
1331	1-1330 and 1332-8376
1332	1-1331 and 1333-8376
1333	1-1332 and 1334-8376
1334	1-1333 and 1335-8376
1335	1-1334 and 1336-8376
1336	1-1335 and 1337-8376
1337	1-1336 and 1338-8376
1338	1-1337 and 1339-8376
1339	1-1338 and 1340-8376
1340	1-1339 and 1341-8376
1341	1-1340 and 1342-8376
1342	1-1341 and 1343-8376
1343	1-1342 and 1344-8376
1344	1-1343 and 1345-8376
1345	1-1344 and 1346-8376
1346	1-1345 and 1347-8376
1347	1-1346 and 1348-8376
1348	1-1347 and 1349-8376
1349	1-1348 and 1350-8376
1350	1-1349 and 1351-8376
1351	1-1350 and 1352-8376
1352	1-1351 and 1353-8376
1353	1-1352 and 1354-8376
1354	1-1353 and 1355-8376
1355	1-1354 and 1356-8376
1356	1-1355 and 1357-8376
1357	1-1356 and 1358-8376
1358	1-1357 and 1359-8376
1359	1-1358 and 1360-8376
1360	1-1359 and 1361-8376
1361	1-1360 and 1362-8376
1362	1-1361 and 1363-8376
1363	1-1362 and 1364-8376
1364	1-1363 and 1365-8376
1365	1-1364 and 1366-8376
1366	1-1365 and 1367-8376
1367	1-1366 and 1368-8376
1368	1-1367 and 1369-8376
1369	1-1368 and 1370-8376
1370	1-1369 and 1371-8376
1371	1-1370 and 1372-8376
1372	1-1371 and 1373-8376
1373	1-1372 and 1374-8376
1374	1-1373 and 1375-8376
1375	1-1374 and 1376-8376
1376	1-1375 and 1377-8376
1377	1-1376 and 1378-8376
1378	1-1377 and 1379-8376
1379	1-1378 and 1380-8376
1380	1-1379 and 1381-8376
1381	1-1380 and 1382-8376
1382	1-1381 and 1383-8376

1383	1-1382 and 1384-8376
1384	1-1383 and 1385-8376
1385	1-1384 and 1386-8376
1386	1-1385 and 1387-8376
1387	1-1386 and 1388-8376
1388	1-1387 and 1389-8376
1389	1-1388 and 1390-8376
1390	1-1389 and 1391-8376
1391	1-1390 and 1392-8376
1392	1-1391 and 1393-8376
1393	1-1392 and 1394-8376
1394	1-1393 and 1395-8376
1395	1-1394 and 1396-8376
1396	1-1395 and 1397-8376
1397	1-1396 and 1398-8376
1398	1-1397 and 1399-8376
1399	1-1398 and 1400-8376
1400	1-1399 and 1401-8376
1401	1-1400 and 1402-8376
1402	1-1401 and 1403-8376
1403	1-1402 and 1404-8376
1404	1-1403 and 1405-8376
1405	1-1404 and 1406-8376
1406	1-1405 and 1407-8376
1407	1-1406 and 1408-8376
1408	1-1407 and 1409-8376
1409	1-1408 and 1410-8376
1410	1-1409 and 1411-8376
1411	1-1410 and 1412-8376
1412	1-1411 and 1413-8376
1413	1-1412 and 1414-8376
1414	1-1413 and 1415-8376
1415	1-1414 and 1416-8376
1416	1-1415 and 1417-8376
1417	1-1416 and 1418-8376
1418	1-1417 and 1419-8376
1419	1-1418 and 1420-8376
1420	1-1419 and 1421-8376
1421	1-1420 and 1422-8376
1422	1-1421 and 1423-8376
1423	1-1422 and 1424-8376
1424	1-1423 and 1425-8376
1425	1-1424 and 1426-8376
1426	1-1425 and 1427-8376
1427	1-1426 and 1428-8376
1428	1-1427 and 1429-8376
1429	1-1428 and 1430-8376
1430	1-1429 and 1431-8376
1431	1-1430 and 1432-8376
1432	1-1431 and 1433-8376
1433	1-1432 and 1434-8376
1434	1-1433 and 1435-8376
1435	1-1434 and 1436-8376
1436	1-1435 and 1437-8376
1437	1-1436 and 1438-8376
1438	1-1437 and 1439-8376
1439	1-1438 and 1440-8376

1441	1-1439 and 1441-8376
1442	1-1440 and 1442-8376
1443	1-1441 and 1443-8376
1444	1-1442 and 1444-8376
1445	1-1443 and 1445-8376
1446	1-1444 and 1446-8376
1447	1-1445 and 1447-8376
1448	1-1446 and 1448-8376
1449	1-1447 and 1449-8376
1450	1-1448 and 1450-8376
1451	1-1449 and 1451-8376
1452	1-1450 and 1452-8376
1453	1-1451 and 1453-8376
1454	1-1452 and 1454-8376
1455	1-1453 and 1455-8376
1456	1-1454 and 1456-8376
1457	1-1455 and 1457-8376
1458	1-1456 and 1458-8376
1459	1-1457 and 1459-8376
1460	1-1458 and 1460-8376
1461	1-1459 and 1461-8376
1462	1-1460 and 1462-8376
1463	1-1461 and 1463-8376
1464	1-1462 and 1464-8376
1465	1-1463 and 1465-8376
1466	1-1464 and 1466-8376
1467	1-1465 and 1467-8376
1468	1-1466 and 1468-8376
1469	1-1467 and 1469-8376
1470	1-1468 and 1470-8376
1471	1-1469 and 1471-8376
1472	1-1470 and 1472-8376
1473	1-1471 and 1473-8376
1474	1-1472 and 1474-8376
1475	1-1473 and 1475-8376
1476	1-1474 and 1476-8376
1477	1-1475 and 1477-8376
1478	1-1476 and 1478-8376
1479	1-1477 and 1479-8376
1480	1-1478 and 1480-8376
1481	1-1479 and 1481-8376
1482	1-1480 and 1482-8376
1483	1-1481 and 1483-8376
1484	1-1482 and 1484-8376
1485	1-1483 and 1485-8376
1486	1-1484 and 1486-8376
1487	1-1485 and 1487-8376
1488	1-1486 and 1488-8376
1489	1-1487 and 1489-8376
1490	1-1488 and 1490-8376
1491	1-1489 and 1491-8376
1492	1-1490 and 1492-8376
1493	1-1491 and 1493-8376
1494	1-1492 and 1494-8376
1495	1-1493 and 1495-8376
1496	1-1494 and 1496-8376
1497	1-1495 and 1497-8376

1497	1-1496 and 1498-8376
1498	1-1497 and 1499-8376
1499	1-1498 and 1500-8376
1500	1-1499 and 1501-8376
1501	1-1500 and 1502-8376
1502	1-1501 and 1503-8376
1503	1-1502 and 1504-8376
1504	1-1503 and 1505-8376
1505	1-1504 and 1506-8376
1506	1-1505 and 1507-8376
1507	1-1506 and 1508-8376
1508	1-1507 and 1509-8376
1509	1-1508 and 1510-8376
1510	1-1509 and 1511-8376
1511	1-1510 and 1512-8376
1512	1-1511 and 1513-8376
1513	1-1512 and 1514-8376
1514	1-1513 and 1515-8376
1515	1-1514 and 1516-8376
1516	1-1515 and 1517-8376
1517	1-1516 and 1518-8376
1518	1-1517 and 1519-8376
1519	1-1518 and 1520-8376
1520	1-1519 and 1521-8376
1521	1-1520 and 1522-8376
1522	1-1521 and 1523-8376
1523	1-1522 and 1524-8376
1524	1-1523 and 1525-8376
1525	1-1524 and 1526-8376
1526	1-1525 and 1527-8376
1527	1-1526 and 1528-8376
1528	1-1527 and 1529-8376
1529	1-1528 and 1530-8376
1530	1-1529 and 1531-8376
1531	1-1530 and 1532-8376
1532	1-1531 and 1533-8376
1533	1-1532 and 1534-8376
1534	1-1533 and 1535-8376
1535	1-1534 and 1536-8376
1536	1-1535 and 1537-8376
1537	1-1536 and 1538-8376
1538	1-1537 and 1539-8376
1539	1-1538 and 1540-8376
1540	1-1539 and 1541-8376
1541	1-1540 and 1542-8376
1542	1-1541 and 1543-8376
1543	1-1542 and 1544-8376
1544	1-1543 and 1545-8376
1545	1-1544 and 1546-8376
1546	1-1545 and 1547-8376
1547	1-1546 and 1548-8376
1548	1-1547 and 1549-8376
1549	1-1548 and 1550-8376
1550	1-1549 and 1551-8376
1551	1-1550 and 1552-8376
1552	1-1551 and 1553-8376
1553	1-1552 and 1554-8376

1554	1-1553 and 1555-8376
1555	1-1554 and 1556-8376
1556	1-1555 and 1557-8376
1557	1-1556 and 1558-8376
1558	1-1557 and 1559-8376
1559	1-1558 and 1560-8376
1560	1-1559 and 1561-8376
1561	1-1560 and 1562-8376
1562	1-1561 and 1563-8376
1563	1-1562 and 1564-8376
1564	1-1563 and 1565-8376
1565	1-1564 and 1566-8376
1566	1-1565 and 1567-8376
1567	1-1566 and 1568-8376
1568	1-1567 and 1569-8376
1569	1-1568 and 1570-8376
1570	1-1569 and 1571-8376
1571	1-1570 and 1572-8376
1572	1-1571 and 1573-8376
1573	1-1572 and 1574-8376
1574	1-1573 and 1575-8376
1575	1-1574 and 1576-8376
1576	1-1575 and 1577-8376
1577	1-1576 and 1578-8376
1578	1-1577 and 1579-8376
1579	1-1578 and 1580-8376
1580	1-1579 and 1581-8376
1581	1-1580 and 1582-8376
1582	1-1581 and 1583-8376
1583	1-1582 and 1584-8376
1584	1-1583 and 1585-8376
1585	1-1584 and 1586-8376
1586	1-1585 and 1587-8376
1587	1-1586 and 1588-8376
1588	1-1587 and 1589-8376
1589	1-1588 and 1590-8376
1590	1-1589 and 1591-8376
1591	1-1590 and 1592-8376
1592	1-1591 and 1593-8376
1593	1-1592 and 1594-8376
1594	1-1593 and 1595-8376
1595	1-1594 and 1596-8376
1596	1-1595 and 1597-8376
1597	1-1596 and 1598-8376
1598	1-1597 and 1599-8376
1599	1-1598 and 1600-8376
1600	1-1599 and 1601-8376
1601	1-1600 and 1602-8376
1602	1-1601 and 1603-8376
1603	1-1602 and 1604-8376
1604	1-1603 and 1605-8376
1605	1-1604 and 1606-8376
1606	1-1605 and 1607-8376
1607	1-1606 and 1608-8376
1608	1-1607 and 1609-8376
1609	1-1608 and 1610-8376
1610	1-1609 and 1611-8376

1611	1-1610 and 1612-8376	1668	1-1667 and 1669-8376	1725	1-1724 and 1726-8376
1612	1-1611 and 1613-8376	1669	1-1668 and 1670-8376	1726	1-1725 and 1727-8376
1613	1-1612 and 1614-8376	1670	1-1669 and 1671-8376	1727	1-1726 and 1728-8376
1614	1-1613 and 1615-8376	1671	1-1670 and 1672-8376	1728	1-1727 and 1729-8376
1615	1-1614 and 1616-8376	1672	1-1671 and 1673-8376	1729	1-1728 and 1730-8376
1616	1-1615 and 1617-8376	1673	1-1672 and 1674-8376	1730	1-1729 and 1731-8376
1617	1-1616 and 1618-8376	1674	1-1673 and 1675-8376	1731	1-1730 and 1732-8376
1618	1-1617 and 1619-8376	1675	1-1674 and 1676-8376	1732	1-1731 and 1733-8376
1619	1-1618 and 1620-8376	1676	1-1675 and 1677-8376	1733	1-1732 and 1734-8376
1620	1-1619 and 1621-8376	1677	1-1676 and 1678-8376	1734	1-1733 and 1735-8376
1621	1-1620 and 1622-8376	1678	1-1677 and 1679-8376	1735	1-1734 and 1736-8376
1622	1-1621 and 1623-8376	1679	1-1678 and 1680-8376	1736	1-1735 and 1737-8376
1623	1-1622 and 1624-8376	1680	1-1679 and 1681-8376	1737	1-1736 and 1738-8376
1624	1-1623 and 1625-8376	1681	1-1680 and 1682-8376	1738	1-1737 and 1739-8376
1625	1-1624 and 1626-8376	1682	1-1681 and 1683-8376	1739	1-1738 and 1740-8376
1626	1-1625 and 1627-8376	1683	1-1682 and 1684-8376	1740	1-1739 and 1741-8376
1627	1-1626 and 1628-8376	1684	1-1683 and 1685-8376	1741	1-1740 and 1742-8376
1628	1-1627 and 1629-8376	1685	1-1684 and 1686-8376	1742	1-1741 and 1743-8376
1629	1-1628 and 1630-8376	1686	1-1685 and 1687-8376	1743	1-1742 and 1744-8376
1630	1-1629 and 1631-8376	1687	1-1686 and 1688-8376	1744	1-1743 and 1745-8376
1631	1-1630 and 1632-8376	1688	1-1687 and 1689-8376	1745	1-1744 and 1746-8376
1632	1-1631 and 1633-8376	1689	1-1688 and 1690-8376	1746	1-1745 and 1747-8376
1633	1-1632 and 1634-8376	1690	1-1689 and 1691-8376	1747	1-1746 and 1748-8376
1634	1-1633 and 1635-8376	1691	1-1690 and 1692-8376	1748	1-1747 and 1749-8376
1635	1-1634 and 1636-8376	1692	1-1691 and 1693-8376	1749	1-1748 and 1750-8376
1636	1-1635 and 1637-8376	1693	1-1692 and 1694-8376	1750	1-1749 and 1751-8376
1637	1-1636 and 1638-8376	1694	1-1693 and 1695-8376	1751	1-1750 and 1752-8376
1638	1-1637 and 1639-8376	1695	1-1694 and 1696-8376	1752	1-1751 and 1753-8376
1639	1-1638 and 1640-8376	1696	1-1695 and 1697-8376	1753	1-1752 and 1754-8376
1640	1-1639 and 1641-8376	1697	1-1696 and 1698-8376	1754	1-1753 and 1755-8376
1641	1-1640 and 1642-8376	1698	1-1697 and 1699-8376	1755	1-1754 and 1756-8376
1642	1-1641 and 1643-8376	1699	1-1698 and 1700-8376	1756	1-1755 and 1757-8376
1643	1-1642 and 1644-8376	1700	1-1699 and 1701-8376	1757	1-1756 and 1758-8376
1644	1-1643 and 1645-8376	1701	1-1700 and 1702-8376	1758	1-1757 and 1759-8376
1645	1-1644 and 1646-8376	1702	1-1701 and 1703-8376	1759	1-1758 and 1760-8376
1646	1-1645 and 1647-8376	1703	1-1702 and 1704-8376	1760	1-1759 and 1761-8376
1647	1-1646 and 1648-8376	1704	1-1703 and 1705-8376	1761	1-1760 and 1762-8376
1648	1-1647 and 1649-8376	1705	1-1704 and 1706-8376	1762	1-1761 and 1763-8376
1649	1-1648 and 1650-8376	1706	1-1705 and 1707-8376	1763	1-1762 and 1764-8376
1650	1-1649 and 1651-8376	1707	1-1706 and 1708-8376	1764	1-1763 and 1765-8376
1651	1-1650 and 1652-8376	1708	1-1707 and 1709-8376	1765	1-1764 and 1766-8376
1652	1-1651 and 1653-8376	1709	1-1708 and 1710-8376	1766	1-1765 and 1767-8376
1653	1-1652 and 1654-8376	1710	1-1709 and 1711-8376	1767	1-1766 and 1768-8376
1654	1-1653 and 1655-8376	1711	1-1710 and 1712-8376	1768	1-1767 and 1769-8376
1655	1-1654 and 1656-8376	1712	1-1711 and 1713-8376	1769	1-1768 and 1770-8376
1656	1-1655 and 1657-8376	1713	1-1712 and 1714-8376	1770	1-1769 and 1771-8376
1657	1-1656 and 1658-8376	1714	1-1713 and 1715-8376	1771	1-1770 and 1772-8376
1658	1-1657 and 1659-8376	1715	1-1714 and 1716-8376	1772	1-1771 and 1773-8376
1659	1-1658 and 1660-8376	1716	1-1715 and 1717-8376	1773	1-1772 and 1774-8376
1660	1-1659 and 1661-8376	1717	1-1716 and 1718-8376	1774	1-1773 and 1775-8376
1661	1-1660 and 1662-8376	1718	1-1717 and 1719-8376	1775	1-1774 and 1776-8376
1662	1-1661 and 1663-8376	1719	1-1718 and 1720-8376	1776	1-1775 and 1777-8376
1663	1-1662 and 1664-8376	1720	1-1719 and 1721-8376	1777	1-1776 and 1778-8376
1664	1-1663 and 1665-8376	1721	1-1720 and 1722-8376	1778	1-1777 and 1779-8376
1665	1-1664 and 1666-8376	1722	1-1721 and 1723-8376	1779	1-1778 and 1780-8376
1666	1-1665 and 1667-8376	1723	1-1722 and 1724-8376	1780	1-1779 and 1781-8376
1667	1-1666 and 1668-8376	1724	1-1723 and 1725-8376	1781	1-1780 and 1782-8376



1782	1-1781 and 1783-8376	1839	1-1838 and 1840-8376	1896	1-1895 and 1897-8376
1783	1-1782 and 1784-8376	1840	1-1839 and 1841-8376	1897	1-1896 and 1898-8376
1784	1-1783 and 1785-8376	1841	1-1840 and 1842-8376	1898	1-1897 and 1899-8376
1785	1-1784 and 1786-8376	1842	1-1841 and 1843-8376	1899	1-1898 and 1900-8376
1786	1-1785 and 1787-8376	1843	1-1842 and 1844-8376	1900	1-1899 and 1901-8376
1787	1-1786 and 1788-8376	1844	1-1843 and 1845-8376	1901	1-1900 and 1902-8376
1788	1-1787 and 1789-8376	1845	1-1844 and 1846-8376	1902	1-1901 and 1903-8376
1789	1-1788 and 1790-8376	1846	1-1845 and 1847-8376	1903	1-1902 and 1904-8376
1790	1-1789 and 1791-8376	1847	1-1846 and 1848-8376	1904	1-1903 and 1905-8376
1791	1-1790 and 1792-8376	1848	1-1847 and 1849-8376	1905	1-1904 and 1906-8376
1792	1-1791 and 1793-8376	1849	1-1848 and 1850-8376	1906	1-1905 and 1907-8376
1793	1-1792 and 1794-8376	1850	1-1849 and 1851-8376	1907	1-1906 and 1908-8376
1794	1-1793 and 1795-8376	1851	1-1850 and 1852-8376	1908	1-1907 and 1909-8376
1795	1-1794 and 1796-8376	1852	1-1851 and 1853-8376	1909	1-1908 and 1910-8376
1796	1-1795 and 1797-8376	1853	1-1852 and 1854-8376	1910	1-1909 and 1911-8376
1797	1-1796 and 1798-8376	1854	1-1853 and 1855-8376	1911	1-1910 and 1912-8376
1798	1-1797 and 1799-8376	1855	1-1854 and 1856-8376	1912	1-1911 and 1913-8376
1799	1-1798 and 1800-8376	1856	1-1855 and 1857-8376	1913	1-1912 and 1914-8376
1800	1-1799 and 1801-8376	1857	1-1856 and 1858-8376	1914	1-1913 and 1915-8376
1801	1-1800 and 1802-8376	1858	1-1857 and 1859-8376	1915	1-1914 and 1916-8376
1802	1-1801 and 1803-8376	1859	1-1858 and 1860-8376	1916	1-1915 and 1917-8376
1803	1-1802 and 1804-8376	1860	1-1859 and 1861-8376	1917	1-1916 and 1918-8376
1804	1-1803 and 1805-8376	1861	1-1860 and 1862-8376	1918	1-1917 and 1919-8376
1805	1-1804 and 1806-8376	1862	1-1861 and 1863-8376	1919	1-1918 and 1920-8376
1806	1-1805 and 1807-8376	1863	1-1862 and 1864-8376	1920	1-1919 and 1921-8376
1807	1-1806 and 1808-8376	1864	1-1863 and 1865-8376	1921	1-1920 and 1922-8376
1808	1-1807 and 1809-8376	1865	1-1864 and 1866-8376	1922	1-1921 and 1923-8376
1809	1-1808 and 1810-8376	1866	1-1865 and 1867-8376	1923	1-1922 and 1924-8376
1810	1-1809 and 1811-8376	1867	1-1866 and 1868-8376	1924	1-1923 and 1925-8376
1811	1-1810 and 1812-8376	1868	1-1867 and 1869-8376	1925	1-1924 and 1926-8376
1812	1-1811 and 1813-8376	1869	1-1868 and 1870-8376	1926	1-1925 and 1927-8376
1813	1-1812 and 1814-8376	1870	1-1869 and 1871-8376	1927	1-1926 and 1928-8376
1814	1-1813 and 1815-8376	1871	1-1870 and 1872-8376	1928	1-1927 and 1929-8376
1815	1-1814 and 1816-8376	1872	1-1871 and 1873-8376	1929	1-1928 and 1930-8376
1816	1-1815 and 1817-8376	1873	1-1872 and 1874-8376	1930	1-1929 and 1931-8376
1817	1-1816 and 1818-8376	1874	1-1873 and 1875-8376	1931	1-1930 and 1932-8376
1818	1-1817 and 1819-8376	1875	1-1874 and 1876-8376	1932	1-1931 and 1933-8376
1819	1-1818 and 1820-8376	1876	1-1875 and 1877-8376	1933	1-1932 and 1934-8376
1820	1-1819 and 1821-8376	1877	1-1876 and 1878-8376	1934	1-1933 and 1935-8376
1821	1-1820 and 1822-8376	1878	1-1877 and 1879-8376	1935	1-1934 and 1936-8376
1822	1-1821 and 1823-8376	1879	1-1878 and 1880-8376	1936	1-1935 and 1937-8376
1823	1-1822 and 1824-8376	1880	1-1879 and 1881-8376	1937	1-1936 and 1938-8376
1824	1-1823 and 1825-8376	1881	1-1880 and 1882-8376	1938	1-1937 and 1939-8376
1825	1-1824 and 1826-8376	1882	1-1881 and 1883-8376	1939	1-1938 and 1940-8376
1826	1-1825 and 1827-8376	1883	1-1882 and 1884-8376	1940	1-1939 and 1941-8376
1827	1-1826 and 1828-8376	1884	1-1883 and 1885-8376	1941	1-1940 and 1942-8376
1828	1-1827 and 1829-8376	1885	1-1884 and 1886-8376	1942	1-1941 and 1943-8376
1829	1-1828 and 1830-8376	1886	1-1885 and 1887-8376	1943	1-1942 and 1944-8376
1830	1-1829 and 1831-8376	1887	1-1886 and 1888-8376	1944	1-1943 and 1945-8376
1831	1-1830 and 1832-8376	1888	1-1887 and 1889-8376	1945	1-1944 and 1946-8376
1832	1-1831 and 1833-8376	1889	1-1888 and 1890-8376	1946	1-1945 and 1947-8376
1833	1-1832 and 1834-8376	1890	1-1889 and 1891-8376	1947	1-1946 and 1948-8376
1834	1-1833 and 1835-8376	1891	1-1890 and 1892-8376	1948	1-1947 and 1949-8376
1835	1-1834 and 1836-8376	1892	1-1891 and 1893-8376	1949	1-1948 and 1950-8376
1836	1-1835 and 1837-8376	1893	1-1892 and 1894-8376	1950	1-1949 and 1951-8376
1837	1-1836 and 1838-8376	1894	1-1893 and 1895-8376	1951	1-1950 and 1952-8376
1838	1-1837 and 1839-8376	1895	1-1894 and 1896-8376	1952	1-1951 and 1953-8376

1953	1-1952 and 1954-8376	2010	1-2009 and 2011-8376	2067	1-2066 and 2068-8376
1954	1-1953 and 1955-8376	2011	1-2010 and 2012-8376	2068	1-2067 and 2069-8376
1955	1-1954 and 1956-8376	2012	1-2011 and 2013-8376	2069	1-2068 and 2070-8376
1956	1-1955 and 1957-8376	2013	1-2012 and 2014-8376	2070	1-2069 and 2071-8376
1957	1-1956 and 1958-8376	2014	1-2013 and 2015-8376	2071	1-2070 and 2072-8376
1958	1-1957 and 1959-8376	2015	1-2014 and 2016-8376	2072	1-2071 and 2073-8376
1959	1-1958 and 1960-8376	2016	1-2015 and 2017-8376	2073	1-2072 and 2074-8376
1960	1-1959 and 1961-8376	2017	1-2016 and 2018-8376	2074	1-2073 and 2075-8376
1961	1-1960 and 1962-8376	2018	1-2017 and 2019-8376	2075	1-2074 and 2076-8376
1962	1-1961 and 1963-8376	2019	1-2018 and 2020-8376	2076	1-2075 and 2077-8376
1963	1-1962 and 1964-8376	2020	1-2019 and 2021-8376	2077	1-2076 and 2078-8376
1964	1-1963 and 1965-8376	2021	1-2020 and 2022-8376	2078	1-2077 and 2079-8376
1965	1-1964 and 1966-8376	2022	1-2021 and 2023-8376	2079	1-2078 and 2080-8376
1966	1-1965 and 1967-8376	2023	1-2022 and 2024-8376	2080	1-2079 and 2081-8376
1967	1-1966 and 1968-8376	2024	1-2023 and 2025-8376	2081	1-2080 and 2082-8376
1968	1-1967 and 1969-8376	2025	1-2024 and 2026-8376	2082	1-2081 and 2083-8376
1969	1-1968 and 1970-8376	2026	1-2025 and 2027-8376	2083	1-2082 and 2084-8376
1970	1-1969 and 1971-8376	2027	1-2026 and 2028-8376	2084	1-2083 and 2085-8376
1971	1-1970 and 1972-8376	2028	1-2027 and 2029-8376	2085	1-2084 and 2086-8376
1972	1-1971 and 1973-8376	2029	1-2028 and 2030-8376	2086	1-2085 and 2087-8376
1973	1-1972 and 1974-8376	2030	1-2029 and 2031-8376	2087	1-2086 and 2088-8376
1974	1-1973 and 1975-8376	2031	1-2030 and 2032-8376	2088	1-2087 and 2089-8376
1975	1-1974 and 1976-8376	2032	1-2031 and 2033-8376	2089	1-2088 and 2090-8376
1976	1-1975 and 1977-8376	2033	1-2032 and 2034-8376	2090	1-2089 and 2091-8376
1977	1-1976 and 1978-8376	2034	1-2033 and 2035-8376	2091	1-2090 and 2092-8376
1978	1-1977 and 1979-8376	2035	1-2034 and 2036-8376	2092	1-2091 and 2093-8376
1979	1-1978 and 1980-8376	2036	1-2035 and 2037-8376	2093	1-2092 and 2094-8376
1980	1-1979 and 1981-8376	2037	1-2036 and 2038-8376	2094	1-2093 and 2095-8376
1981	1-1980 and 1982-8376	2038	1-2037 and 2039-8376	2095	1-2094 and 2096-8376
1982	1-1981 and 1983-8376	2039	1-2038 and 2040-8376	2096	1-2095 and 2097-8376
1983	1-1982 and 1984-8376	2040	1-2039 and 2041-8376	2097	1-2096 and 2098-8376
1984	1-1983 and 1985-8376	2041	1-2040 and 2042-8376	2098	1-2097 and 2099-8376
1985	1-1984 and 1986-8376	2042	1-2041 and 2043-8376	2099	1-2098 and 2100-8376
1986	1-1985 and 1987-8376	2043	1-2042 and 2044-8376	2100	1-2099 and 2101-8376
1987	1-1986 and 1988-8376	2044	1-2043 and 2045-8376	2101	1-2100 and 2102-8376
1988	1-1987 and 1989-8376	2045	1-2044 and 2046-8376	2102	1-2101 and 2103-8376
1989	1-1988 and 1990-8376	2046	1-2045 and 2047-8376	2103	1-2102 and 2104-8376
1990	1-1989 and 1991-8376	2047	1-2046 and 2048-8376	2104	1-2103 and 2105-8376
1991	1-1990 and 1992-8376	2048	1-2047 and 2049-8376	2105	1-2104 and 2106-8376
1992	1-1991 and 1993-8376	2049	1-2048 and 2050-8376	2106	1-2105 and 2107-8376
1993	1-1992 and 1994-8376	2050	1-2049 and 2051-8376	2107	1-2106 and 2108-8376
1994	1-1993 and 1995-8376	2051	1-2050 and 2052-8376	2108	1-2107 and 2109-8376
1995	1-1994 and 1996-8376	2052	1-2051 and 2053-8376	2109	1-2108 and 2110-8376
1996	1-1995 and 1997-8376	2053	1-2052 and 2054-8376	2110	1-2109 and 2111-8376
1997	1-1996 and 1998-8376	2054	1-2053 and 2055-8376	2111	1-2110 and 2112-8376
1998	1-1997 and 1999-8376	2055	1-2054 and 2056-8376	2112	1-2111 and 2113-8376
1999	1-1998 and 2000-8376	2056	1-2055 and 2057-8376	2113	1-2112 and 2114-8376
2000	1-1999 and 2001-8376	2057	1-2056 and 2058-8376	2114	1-2113 and 2115-8376
2001	1-2000 and 2002-8376	2058	1-2057 and 2059-8376	2115	1-2114 and 2116-8376
2002	1-2001 and 2003-8376	2059	1-2058 and 2060-8376	2116	1-2115 and 2117-8376
2003	1-2002 and 2004-8376	2060	1-2059 and 2061-8376	2117	1-2116 and 2118-8376
2004	1-2003 and 2005-8376	2061	1-2060 and 2062-8376	2118	1-2117 and 2119-8376
2005	1-2004 and 2006-8376	2062	1-2061 and 2063-8376	2119	1-2118 and 2120-8376
2006	1-2005 and 2007-8376	2063	1-2062 and 2064-8376	2120	1-2119 and 2121-8376
2007	1-2006 and 2008-8376	2064	1-2063 and 2065-8376	2121	1-2120 and 2122-8376
2008	1-2007 and 2009-8376	2065	1-2064 and 2066-8376	2122	1-2121 and 2123-8376
2009	1-2008 and 2010-8376	2066	1-2065 and 2067-8376	2123	1-2122 and 2124-8376

2124	1-2123 and 2125-8376	2181	1-2180 and 2182-8376	2238	1-2237 and 2239-8376
2125	1-2124 and 2126-8376	2182	1-2181 and 2183-8376	2239	1-2238 and 2240-8376
2126	1-2125 and 2127-8376	2183	1-2182 and 2184-8376	2240	1-2239 and 2241-8376
2127	1-2126 and 2128-8376	2184	1-2183 and 2185-8376	2241	1-2240 and 2242-8376
2128	1-2127 and 2129-8376	2185	1-2184 and 2186-8376	2242	1-2241 and 2243-8376
2129	1-2128 and 2130-8376	2186	1-2185 and 2187-8376	2243	1-2242 and 2244-8376
2130	1-2129 and 2131-8376	2187	1-2186 and 2188-8376	2244	1-2243 and 2245-8376
2131	1-2130 and 2132-8376	2188	1-2187 and 2189-8376	2245	1-2244 and 2246-8376
2132	1-2131 and 2133-8376	2189	1-2188 and 2190-8376	2246	1-2245 and 2247-8376
2133	1-2132 and 2134-8376	2190	1-2189 and 2191-8376	2247	1-2246 and 2248-8376
2134	1-2133 and 2135-8376	2191	1-2190 and 2192-8376	2248	1-2247 and 2249-8376
2135	1-2134 and 2136-8376	2192	1-2191 and 2193-8376	2249	1-2248 and 2250-8376
2136	1-2135 and 2137-8376	2193	1-2192 and 2194-8376	2250	1-2249 and 2251-8376
2137	1-2136 and 2138-8376	2194	1-2193 and 2195-8376	2251	1-2250 and 2252-8376
2138	1-2137 and 2139-8376	2195	1-2194 and 2196-8376	2252	1-2251 and 2253-8376
2139	1-2138 and 2140-8376	2196	1-2195 and 2197-8376	2253	1-2252 and 2254-8376
2140	1-2139 and 2141-8376	2197	1-2196 and 2198-8376	2254	1-2253 and 2255-8376
2141	1-2140 and 2142-8376	2198	1-2197 and 2199-8376	2255	1-2254 and 2256-8376
2142	1-2141 and 2143-8376	2199	1-2198 and 2200-8376	2256	1-2255 and 2257-8376
2143	1-2142 and 2144-8376	2200	1-2199 and 2201-8376	2257	1-2256 and 2258-8376
2144	1-2143 and 2145-8376	2201	1-2200 and 2202-8376	2258	1-2257 and 2259-8376
2145	1-2144 and 2146-8376	2202	1-2201 and 2203-8376	2259	1-2258 and 2260-8376
2146	1-2145 and 2147-8376	2203	1-2202 and 2204-8376	2260	1-2259 and 2261-8376
2147	1-2146 and 2148-8376	2204	1-2203 and 2205-8376	2261	1-2260 and 2262-8376
2148	1-2147 and 2149-8376	2205	1-2204 and 2206-8376	2262	1-2261 and 2263-8376
2149	1-2148 and 2150-8376	2206	1-2205 and 2207-8376	2263	1-2262 and 2264-8376
2150	1-2149 and 2151-8376	2207	1-2206 and 2208-8376	2264	1-2263 and 2265-8376
2151	1-2150 and 2152-8376	2208	1-2207 and 2209-8376	2265	1-2264 and 2266-8376
2152	1-2151 and 2153-8376	2209	1-2208 and 2210-8376	2266	1-2265 and 2267-8376
2153	1-2152 and 2154-8376	2210	1-2209 and 2211-8376	2267	1-2266 and 2268-8376
2154	1-2153 and 2155-8376	2211	1-2210 and 2212-8376	2268	1-2267 and 2269-8376
2155	1-2154 and 2156-8376	2212	1-2211 and 2213-8376	2269	1-2268 and 2270-8376
2156	1-2155 and 2157-8376	2213	1-2212 and 2214-8376	2270	1-2269 and 2271-8376
2157	1-2156 and 2158-8376	2214	1-2213 and 2215-8376	2271	1-2270 and 2272-8376
2158	1-2157 and 2159-8376	2215	1-2214 and 2216-8376	2272	1-2271 and 2273-8376
2159	1-2158 and 2160-8376	2216	1-2215 and 2217-8376	2273	1-2272 and 2274-8376
2160	1-2159 and 2161-8376	2217	1-2216 and 2218-8376	2274	1-2273 and 2275-8376
2161	1-2160 and 2162-8376	2218	1-2217 and 2219-8376	2275	1-2274 and 2276-8376
2162	1-2161 and 2163-8376	2219	1-2218 and 2220-8376	2276	1-2275 and 2277-8376
2163	1-2162 and 2164-8376	2220	1-2219 and 2221-8376	2277	1-2276 and 2278-8376
2164	1-2163 and 2165-8376	2221	1-2220 and 2222-8376	2278	1-2277 and 2279-8376
2165	1-2164 and 2166-8376	2222	1-2221 and 2223-8376	2279	1-2278 and 2280-8376
2166	1-2165 and 2167-8376	2223	1-2222 and 2224-8376	2280	1-2279 and 2281-8376
2167	1-2166 and 2168-8376	2224	1-2223 and 2225-8376	2281	1-2280 and 2282-8376
2168	1-2167 and 2169-8376	2225	1-2224 and 2226-8376	2282	1-2281 and 2283-8376
2169	1-2168 and 2170-8376	2226	1-2225 and 2227-8376	2283	1-2282 and 2284-8376
2170	1-2169 and 2171-8376	2227	1-2226 and 2228-8376	2284	1-2283 and 2285-8376
2171	1-2170 and 2172-8376	2228	1-2227 and 2229-8376	2285	1-2284 and 2286-8376
2172	1-2171 and 2173-8376	2229	1-2228 and 2230-8376	2286	1-2285 and 2287-8376
2173	1-2172 and 2174-8376	2230	1-2229 and 2231-8376	2287	1-2286 and 2288-8376
2174	1-2173 and 2175-8376	2231	1-2230 and 2232-8376	2288	1-2287 and 2289-8376
2175	1-2174 and 2176-8376	2232	1-2231 and 2233-8376	2289	1-2288 and 2290-8376
2176	1-2175 and 2177-8376	2233	1-2232 and 2234-8376	2290	1-2289 and 2291-8376
2177	1-2176 and 2178-8376	2234	1-2233 and 2235-8376	2291	1-2290 and 2292-8376
2178	1-2177 and 2179-8376	2235	1-2234 and 2236-8376	2292	1-2291 and 2293-8376
2179	1-2178 and 2180-8376	2236	1-2235 and 2237-8376	2293	1-2292 and 2294-8376
2180	1-2179 and 2181-8376	2237	1-2236 and 2238-8376	2294	1-2293 and 2295-8376

2295	1-2294 and 2296-8376
2296	1-2295 and 2297-8376
2297	1-2296 and 2298-8376
2298	1-2297 and 2299-8376
2299	1-2298 and 2300-8376
2300	1-2299 and 2301-8376
2301	1-2300 and 2302-8376
2302	1-2301 and 2303-8376
2303	1-2302 and 2304-8376
2304	1-2303 and 2305-8376
2305	1-2304 and 2306-8376
2306	1-2305 and 2307-8376
2307	1-2306 and 2308-8376
2308	1-2307 and 2309-8376
2309	1-2308 and 2310-8376
2310	1-2309 and 2311-8376
2311	1-2310 and 2312-8376
2312	1-2311 and 2313-8376
2313	1-2312 and 2314-8376
2314	1-2313 and 2315-8376
2315	1-2314 and 2316-8376
2316	1-2315 and 2317-8376
2317	1-2316 and 2318-8376
2318	1-2317 and 2319-8376
2319	1-2318 and 2320-8376
2320	1-2319 and 2321-8376
2321	1-2320 and 2322-8376
2322	1-2321 and 2323-8376
2323	1-2322 and 2324-8376
2324	1-2323 and 2325-8376
2325	1-2324 and 2326-8376
2326	1-2325 and 2327-8376
2327	1-2326 and 2328-8376
2328	1-2327 and 2329-8376
2329	1-2328 and 2330-8376
2330	1-2329 and 2331-8376
2331	1-2330 and 2332-8376
2332	1-2331 and 2333-8376
2333	1-2332 and 2334-8376
2334	1-2333 and 2335-8376
2335	1-2334 and 2336-8376
2336	1-2335 and 2337-8376
2337	1-2336 and 2338-8376
2338	1-2337 and 2339-8376
2339	1-2338 and 2340-8376
2340	1-2339 and 2341-8376
2341	1-2340 and 2342-8376
2342	1-2341 and 2343-8376
2343	1-2342 and 2344-8376
2344	1-2343 and 2345-8376
2345	1-2344 and 2346-8376
2346	1-2345 and 2347-8376
2347	1-2346 and 2348-8376
2348	1-2347 and 2349-8376
2349	1-2348 and 2350-8376
2350	1-2349 and 2351-8376
2351	1-2350 and 2352-8376

2352	1-2351 and 2353-8376
2353	1-2352 and 2354-8376
2354	1-2353 and 2355-8376
2355	1-2354 and 2356-8376
2356	1-2355 and 2357-8376
2357	1-2356 and 2358-8376
2358	1-2357 and 2359-8376
2359	1-2358 and 2360-8376
2360	1-2359 and 2361-8376
2361	1-2360 and 2362-8376
2362	1-2361 and 2363-8376
2363	1-2362 and 2364-8376
2364	1-2363 and 2365-8376
2365	1-2364 and 2366-8376
2366	1-2365 and 2367-8376
2367	1-2366 and 2368-8376
2368	1-2367 and 2369-8376
2369	1-2368 and 2370-8376
2370	1-2369 and 2371-8376
2371	1-2370 and 2372-8376
2372	1-2371 and 2373-8376
2373	1-2372 and 2374-8376
2374	1-2373 and 2375-8376
2375	1-2374 and 2376-8376
2376	1-2375 and 2377-8376
2377	1-2376 and 2378-8376
2378	1-2377 and 2379-8376
2379	1-2378 and 2380-8376
2380	1-2379 and 2381-8376
2381	1-2380 and 2382-8376
2382	1-2381 and 2383-8376
2383	1-2382 and 2384-8376
2384	1-2383 and 2385-8376
2385	1-2384 and 2386-8376
2386	1-2385 and 2387-8376
2387	1-2386 and 2388-8376
2388	1-2387 and 2389-8376
2389	1-2388 and 2390-8376
2390	1-2389 and 2391-8376
2391	1-2390 and 2392-8376
2392	1-2391 and 2393-8376
2393	1-2392 and 2394-8376
2394	1-2393 and 2395-8376
2395	1-2394 and 2396-8376
2396	1-2395 and 2397-8376
2397	1-2396 and 2398-8376
2398	1-2397 and 2399-8376
2399	1-2398 and 2400-8376
2400	1-2399 and 2401-8376
2401	1-2400 and 2402-8376
2402	1-2401 and 2403-8376
2403	1-2402 and 2404-8376
2404	1-2403 and 2405-8376
2405	1-2404 and 2406-8376
2406	1-2405 and 2407-8376
2407	1-2406 and 2408-8376
2408	1-2407 and 2409-8376

2409	1-2408 and 2410-8376
2410	1-2409 and 2411-8376
2411	1-2410 and 2412-8376
2412	1-2411 and 2413-8376
2413	1-2412 and 2414-8376
2414	1-2413 and 2415-8376
2415	1-2414 and 2416-8376
2416	1-2415 and 2417-8376
2417	1-2416 and 2418-8376
2418	1-2417 and 2419-8376
2419	1-2418 and 2420-8376
2420	1-2419 and 2421-8376
2421	1-2420 and 2422-8376
2422	1-2421 and 2423-8376
2423	1-2422 and 2424-8376
2424	1-2423 and 2425-8376
2425	1-2424 and 2426-8376
2426	1-2425 and 2427-8376
2427	1-2426 and 2428-8376
2428	1-2427 and 2429-8376
2429	1-2428 and 2430-8376
2430	1-2429 and 2431-8376
2431	1-2430 and 2432-8376
2432	1-2431 and 2433-8376
2433	1-2432 and 2434-8376
2434	1-2433 and 2435-8376
2435	1-2434 and 2436-8376
2436	1-2435 and 2437-8376
2437	1-2436 and 2438-8376
2438	1-2437 and 2439-8376
2439	1-2438 and 2440-8376
2440	1-2439 and 2441-8376
2441	1-2440 and 2442-8376
2442	1-2441 and 2443-8376
2443	1-2442 and 2444-8376
2444	1-2443 and 2445-8376
2445	1-2444 and 2446-8376
2446	1-2445 and 2447-8376
2447	1-2446 and 2448-8376
2448	1-2447 and 2449-8376
2449	1-2448 and 2450-8376
2450	1-2449 and 2451-8376
2451	1-2450 and 2452-8376
2452	1-2451 and 2453-8376
2453	1-2452 and 2454-8376
2454	1-2453 and 2455-8376
2455	1-2454 and 2456-8376
2456	1-2455 and 2457-8376
2457	1-2456 and 2458-8376
2458	1-2457 and 2459-8376
2459	1-2458 and 2460-8376
2460	1-2459 and 2461-8376
2461	1-2460 and 2462-8376
2462	1-2461 and 2463-8376
2463	1-2462 and 2464-8376
2464	1-2463 and 2465-8376
2465	1-2464 and 2466-8376

2466	1-2465 and 2467-8376	2523	1-2522 and 2524-8376	2580	1-2579 and 2581-8376
2467	1-2466 and 2468-8376	2524	1-2523 and 2525-8376	2581	1-2580 and 2582-8376
2468	1-2467 and 2469-8376	2525	1-2524 and 2526-8376	2582	1-2581 and 2583-8376
2469	1-2468 and 2470-8376	2526	1-2525 and 2527-8376	2583	1-2582 and 2584-8376
2470	1-2469 and 2471-8376	2527	1-2526 and 2528-8376	2584	1-2583 and 2585-8376
2471	1-2470 and 2472-8376	2528	1-2527 and 2529-8376	2585	1-2584 and 2586-8376
2472	1-2471 and 2473-8376	2529	1-2528 and 2530-8376	2586	1-2585 and 2587-8376
2473	1-2472 and 2474-8376	2530	1-2529 and 2531-8376	2587	1-2586 and 2588-8376
2474	1-2473 and 2475-8376	2531	1-2530 and 2532-8376	2588	1-2587 and 2589-8376
2475	1-2474 and 2476-8376	2532	1-2531 and 2533-8376	2589	1-2588 and 2590-8376
2476	1-2475 and 2477-8376	2533	1-2532 and 2534-8376	2590	1-2589 and 2591-8376
2477	1-2476 and 2478-8376	2534	1-2533 and 2535-8376	2591	1-2590 and 2592-8376
2478	1-2477 and 2479-8376	2535	1-2534 and 2536-8376	2592	1-2591 and 2593-8376
2479	1-2478 and 2480-8376	2536	1-2535 and 2537-8376	2593	1-2592 and 2594-8376
2480	1-2479 and 2481-8376	2537	1-2536 and 2538-8376	2594	1-2593 and 2595-8376
2481	1-2480 and 2482-8376	2538	1-2537 and 2539-8376	2595	1-2594 and 2596-8376
2482	1-2481 and 2483-8376	2539	1-2538 and 2540-8376	2596	1-2595 and 2597-8376
2483	1-2482 and 2484-8376	2540	1-2539 and 2541-8376	2597	1-2596 and 2598-8376
2484	1-2483 and 2485-8376	2541	1-2540 and 2542-8376	2598	1-2597 and 2599-8376
2485	1-2484 and 2486-8376	2542	1-2541 and 2543-8376	2599	1-2598 and 2600-8376
2486	1-2485 and 2487-8376	2543	1-2542 and 2544-8376	2600	1-2599 and 2601-8376
2487	1-2486 and 2488-8376	2544	1-2543 and 2545-8376	2601	1-2600 and 2602-8376
2488	1-2487 and 2489-8376	2545	1-2544 and 2546-8376	2602	1-2601 and 2603-8376
2489	1-2488 and 2490-8376	2546	1-2545 and 2547-8376	2603	1-2602 and 2604-8376
2490	1-2489 and 2491-8376	2547	1-2546 and 2548-8376	2604	1-2603 and 2605-8376
2491	1-2490 and 2492-8376	2548	1-2547 and 2549-8376	2605	1-2604 and 2606-8376
2492	1-2491 and 2493-8376	2549	1-2548 and 2550-8376	2606	1-2605 and 2607-8376
2493	1-2492 and 2494-8376	2550	1-2549 and 2551-8376	2607	1-2606 and 2608-8376
2494	1-2493 and 2495-8376	2551	1-2550 and 2552-8376	2608	1-2607 and 2609-8376
2495	1-2494 and 2496-8376	2552	1-2551 and 2553-8376	2609	1-2608 and 2610-8376
2496	1-2495 and 2497-8376	2553	1-2552 and 2554-8376	2610	1-2609 and 2611-8376
2497	1-2496 and 2498-8376	2554	1-2553 and 2555-8376	2611	1-2610 and 2612-8376
2498	1-2497 and 2499-8376	2555	1-2554 and 2556-8376	2612	1-2611 and 2613-8376
2499	1-2498 and 2500-8376	2556	1-2555 and 2557-8376	2613	1-2612 and 2614-8376
2500	1-2499 and 2501-8376	2557	1-2556 and 2558-8376	2614	1-2613 and 2615-8376
2501	1-2500 and 2502-8376	2558	1-2557 and 2559-8376	2615	1-2614 and 2616-8376
2502	1-2501 and 2503-8376	2559	1-2558 and 2560-8376	2616	1-2615 and 2617-8376
2503	1-2502 and 2504-8376	2560	1-2559 and 2561-8376	2617	1-2616 and 2618-8376
2504	1-2503 and 2505-8376	2561	1-2560 and 2562-8376	2618	1-2617 and 2619-8376
2505	1-2504 and 2506-8376	2562	1-2561 and 2563-8376	2619	1-2618 and 2620-8376
2506	1-2505 and 2507-8376	2563	1-2562 and 2564-8376	2620	1-2619 and 2621-8376
2507	1-2506 and 2508-8376	2564	1-2563 and 2565-8376	2621	1-2620 and 2622-8376
2508	1-2507 and 2509-8376	2565	1-2564 and 2566-8376	2622	1-2621 and 2623-8376
2509	1-2508 and 2510-8376	2566	1-2565 and 2567-8376	2623	1-2622 and 2624-8376
2510	1-2509 and 2511-8376	2567	1-2566 and 2568-8376	2624	1-2623 and 2625-8376
2511	1-2510 and 2512-8376	2568	1-2567 and 2569-8376	2625	1-2624 and 2626-8376
2512	1-2511 and 2513-8376	2569	1-2568 and 2570-8376	2626	1-2625 and 2627-8376
2513	1-2512 and 2514-8376	2570	1-2569 and 2571-8376	2627	1-2626 and 2628-8376
2514	1-2513 and 2515-8376	2571	1-2570 and 2572-8376	2628	1-2627 and 2629-8376
2515	1-2514 and 2516-8376	2572	1-2571 and 2573-8376	2629	1-2628 and 2630-8376
2516	1-2515 and 2517-8376	2573	1-2572 and 2574-8376	2630	1-2629 and 2631-8376
2517	1-2516 and 2518-8376	2574	1-2573 and 2575-8376	2631	1-2630 and 2632-8376
2518	1-2517 and 2519-8376	2575	1-2574 and 2576-8376	2632	1-2631 and 2633-8376
2519	1-2518 and 2520-8376	2576	1-2575 and 2577-8376	2633	1-2632 and 2634-8376
2520	1-2519 and 2521-8376	2577	1-2576 and 2578-8376	2634	1-2633 and 2635-8376
2521	1-2520 and 2522-8376	2578	1-2577 and 2579-8376	2635	1-2634 and 2636-8376
2522	1-2521 and 2523-8376	2579	1-2578 and 2580-8376	2636	1-2635 and 2637-8376

2637	1-2636 and 2638-8376	2694	1-2693 and 2695-8376	2751	1-2750 and 2752-8376
2638	1-2637 and 2639-8376	2695	1-2694 and 2696-8376	2752	1-2751 and 2753-8376
2639	1-2638 and 2640-8376	2696	1-2695 and 2697-8376	2753	1-2752 and 2754-8376
2640	1-2639 and 2641-8376	2697	1-2696 and 2698-8376	2754	1-2753 and 2755-8376
2641	1-2640 and 2642-8376	2698	1-2697 and 2699-8376	2755	1-2754 and 2756-8376
2642	1-2641 and 2643-8376	2699	1-2698 and 2700-8376	2756	1-2755 and 2757-8376
2643	1-2642 and 2644-8376	2700	1-2699 and 2701-8376	2757	1-2756 and 2758-8376
2644	1-2643 and 2645-8376	2701	1-2700 and 2702-8376	2758	1-2757 and 2759-8376
2645	1-2644 and 2646-8376	2702	1-2701 and 2703-8376	2759	1-2758 and 2760-8376
2646	1-2645 and 2647-8376	2703	1-2702 and 2704-8376	2760	1-2759 and 2761-8376
2647	1-2646 and 2648-8376	2704	1-2703 and 2705-8376	2761	1-2760 and 2762-8376
2648	1-2647 and 2649-8376	2705	1-2704 and 2706-8376	2762	1-2761 and 2763-8376
2649	1-2648 and 2650-8376	2706	1-2705 and 2707-8376	2763	1-2762 and 2764-8376
2650	1-2649 and 2651-8376	2707	1-2706 and 2708-8376	2764	1-2763 and 2765-8376
2651	1-2650 and 2652-8376	2708	1-2707 and 2709-8376	2765	1-2764 and 2766-8376
2652	1-2651 and 2653-8376	2709	1-2708 and 2710-8376	2766	1-2765 and 2767-8376
2653	1-2652 and 2654-8376	2710	1-2709 and 2711-8376	2767	1-2766 and 2768-8376
2654	1-2653 and 2655-8376	2711	1-2710 and 2712-8376	2768	1-2767 and 2769-8376
2655	1-2654 and 2656-8376	2712	1-2711 and 2713-8376	2769	1-2768 and 2770-8376
2656	1-2655 and 2657-8376	2713	1-2712 and 2714-8376	2770	1-2769 and 2771-8376
2657	1-2656 and 2658-8376	2714	1-2713 and 2715-8376	2771	1-2770 and 2772-8376
2658	1-2657 and 2659-8376	2715	1-2714 and 2716-8376	2772	1-2771 and 2773-8376
2659	1-2658 and 2660-8376	2716	1-2715 and 2717-8376	2773	1-2772 and 2774-8376
2660	1-2659 and 2661-8376	2717	1-2716 and 2718-8376	2774	1-2773 and 2775-8376
2661	1-2660 and 2662-8376	2718	1-2717 and 2719-8376	2775	1-2774 and 2776-8376
2662	1-2661 and 2663-8376	2719	1-2718 and 2720-8376	2776	1-2775 and 2777-8376
2663	1-2662 and 2664-8376	2720	1-2719 and 2721-8376	2777	1-2776 and 2778-8376
2664	1-2663 and 2665-8376	2721	1-2720 and 2722-8376	2778	1-2777 and 2779-8376
2665	1-2664 and 2666-8376	2722	1-2721 and 2723-8376	2779	1-2778 and 2780-8376
2666	1-2665 and 2667-8376	2723	1-2722 and 2724-8376	2780	1-2779 and 2781-8376
2667	1-2666 and 2668-8376	2724	1-2723 and 2725-8376	2781	1-2780 and 2782-8376
2668	1-2667 and 2669-8376	2725	1-2724 and 2726-8376	2782	1-2781 and 2783-8376
2669	1-2668 and 2670-8376	2726	1-2725 and 2727-8376	2783	1-2782 and 2784-8376
2670	1-2669 and 2671-8376	2727	1-2726 and 2728-8376	2784	1-2783 and 2785-8376
2671	1-2670 and 2672-8376	2728	1-2727 and 2729-8376	2785	1-2784 and 2786-8376
2672	1-2671 and 2673-8376	2729	1-2728 and 2730-8376	2786	1-2785 and 2787-8376
2673	1-2672 and 2674-8376	2730	1-2729 and 2731-8376	2787	1-2786 and 2788-8376
2674	1-2673 and 2675-8376	2731	1-2730 and 2732-8376	2788	1-2787 and 2789-8376
2675	1-2674 and 2676-8376	2732	1-2731 and 2733-8376	2789	1-2788 and 2790-8376
2676	1-2675 and 2677-8376	2733	1-2732 and 2734-8376	2790	1-2789 and 2791-8376
2677	1-2676 and 2678-8376	2734	1-2733 and 2735-8376	2791	1-2790 and 2792-8376
2678	1-2677 and 2679-8376	2735	1-2734 and 2736-8376	2792	1-2791 and 2793-8376
2679	1-2678 and 2680-8376	2736	1-2735 and 2737-8376	2793	1-2792 and 2794-8376
2680	1-2679 and 2681-8376	2737	1-2736 and 2738-8376	2794	1-2793 and 2795-8376
2681	1-2680 and 2682-8376	2738	1-2737 and 2739-8376	2795	1-2794 and 2796-8376
2682	1-2681 and 2683-8376	2739	1-2738 and 2740-8376	2796	1-2795 and 2797-8376
2683	1-2682 and 2684-8376	2740	1-2739 and 2741-8376	2797	1-2796 and 2798-8376
2684	1-2683 and 2685-8376	2741	1-2740 and 2742-8376	2798	1-2797 and 2799-8376
2685	1-2684 and 2686-8376	2742	1-2741 and 2743-8376	2799	1-2798 and 2800-8376
2686	1-2685 and 2687-8376	2743	1-2742 and 2744-8376	2800	1-2799 and 2801-8376
2687	1-2686 and 2688-8376	2744	1-2743 and 2745-8376	2801	1-2800 and 2802-8376
2688	1-2687 and 2689-8376	2745	1-2744 and 2746-8376	2802	1-2801 and 2803-8376
2689	1-2688 and 2690-8376	2746	1-2745 and 2747-8376	2803	1-2802 and 2804-8376
2690	1-2689 and 2691-8376	2747	1-2746 and 2748-8376	2804	1-2803 and 2805-8376
2691	1-2690 and 2692-8376	2748	1-2747 and 2749-8376	2805	1-2804 and 2806-8376
2692	1-2691 and 2693-8376	2749	1-2748 and 2750-8376	2806	1-2805 and 2807-8376
2693	1-2692 and 2694-8376	2750	1-2749 and 2751-8376	2807	1-2806 and 2808-8376

2808	1-2807 and 2809-8376
2809	1-2808 and 2810-8376
2810	1-2809 and 2811-8376
2811	1-2810 and 2812-8376
2812	1-2811 and 2813-8376
2813	1-2812 and 2814-8376
2814	1-2813 and 2815-8376
2815	1-2814 and 2816-8376
2816	1-2815 and 2817-8376
2817	1-2816 and 2818-8376
2818	1-2817 and 2819-8376
2819	1-2818 and 2820-8376
2820	1-2819 and 2821-8376
2821	1-2820 and 2822-8376
2822	1-2821 and 2823-8376
2823	1-2822 and 2824-8376
2824	1-2823 and 2825-8376
2825	1-2824 and 2826-8376
2826	1-2825 and 2827-8376
2827	1-2826 and 2828-8376
2828	1-2827 and 2829-8376
2829	1-2828 and 2830-8376
2830	1-2829 and 2831-8376
2831	1-2830 and 2832-8376
2832	1-2831 and 2833-8376
2833	1-2832 and 2834-8376
2834	1-2833 and 2835-8376
2835	1-2834 and 2836-8376
2836	1-2835 and 2837-8376
2837	1-2836 and 2838-8376
2838	1-2837 and 2839-8376
2839	1-2838 and 2840-8376
2840	1-2839 and 2841-8376
2841	1-2840 and 2842-8376
2842	1-2841 and 2843-8376
2843	1-2842 and 2844-8376
2844	1-2843 and 2845-8376
2845	1-2844 and 2846-8376
2846	1-2845 and 2847-8376
2847	1-2846 and 2848-8376
2848	1-2847 and 2849-8376
2849	1-2848 and 2850-8376
2850	1-2849 and 2851-8376
2851	1-2850 and 2852-8376
2852	1-2851 and 2853-8376
2853	1-2852 and 2854-8376
2854	1-2853 and 2855-8376
2855	1-2854 and 2856-8376
2856	1-2855 and 2857-8376
2857	1-2856 and 2858-8376
2858	1-2857 and 2859-8376
2859	1-2858 and 2860-8376
2860	1-2859 and 2861-8376
2861	1-2860 and 2862-8376
2862	1-2861 and 2863-8376
2863	1-2862 and 2864-8376
2864	1-2863 and 2865-8376

2865	1-2864 and 2866-8376
2866	1-2865 and 2867-8376
2867	1-2866 and 2868-8376
2868	1-2867 and 2869-8376
2869	1-2868 and 2870-8376
2870	1-2869 and 2871-8376
2871	1-2870 and 2872-8376
2872	1-2871 and 2873-8376
2873	1-2872 and 2874-8376
2874	1-2873 and 2875-8376
2875	1-2874 and 2876-8376
2876	1-2875 and 2877-8376
2877	1-2876 and 2878-8376
2878	1-2877 and 2879-8376
2879	1-2878 and 2880-8376
2880	1-2879 and 2881-8376
2881	1-2880 and 2882-8376
2882	1-2881 and 2883-8376
2883	1-2882 and 2884-8376
2884	1-2883 and 2885-8376
2885	1-2884 and 2886-8376
2886	1-2885 and 2887-8376
2887	1-2886 and 2888-8376
2888	1-2887 and 2889-8376
2889	1-2888 and 2890-8376
2890	1-2889 and 2891-8376
2891	1-2890 and 2892-8376
2892	1-2891 and 2893-8376
2893	1-2892 and 2894-8376
2894	1-2893 and 2895-8376
2895	1-2894 and 2896-8376
2896	1-2895 and 2897-8376
2897	1-2896 and 2898-8376
2898	1-2897 and 2899-8376
2899	1-2898 and 2900-8376
2900	1-2899 and 2901-8376
2901	1-2900 and 2902-8376
2902	1-2901 and 2903-8376
2903	1-2902 and 2904-8376
2904	1-2903 and 2905-8376
2905	1-2904 and 2906-8376
2906	1-2905 and 2907-8376
2907	1-2906 and 2908-8376
2908	1-2907 and 2909-8376
2909	1-2908 and 2910-8376
2910	1-2909 and 2911-8376
2911	1-2910 and 2912-8376
2912	1-2911 and 2913-8376
2913	1-2912 and 2914-8376
2914	1-2913 and 2915-8376
2915	1-2914 and 2916-8376
2916	1-2915 and 2917-8376
2917	1-2916 and 2918-8376
2918	1-2917 and 2919-8376
2919	1-2918 and 2920-8376
2920	1-2919 and 2921-8376
2921	1-2920 and 2922-8376

2922	1-2921 and 2923-8376
2923	1-2922 and 2924-8376
2924	1-2923 and 2925-8376
2925	1-2924 and 2926-8376
2926	1-2925 and 2927-8376
2927	1-2926 and 2928-8376
2928	1-2927 and 2929-8376
2929	1-2928 and 2930-8376
2930	1-2929 and 2931-8376
2931	1-2930 and 2932-8376
2932	1-2931 and 2933-8376
2933	1-2932 and 2934-8376
2934	1-2933 and 2935-8376
2935	1-2934 and 2936-8376
2936	1-2935 and 2937-8376
2937	1-2936 and 2938-8376
2938	1-2937 and 2939-8376
2939	1-2938 and 2940-8376
2940	1-2939 and 2941-8376
2941	1-2940 and 2942-8376
2942	1-2941 and 2943-8376
2943	1-2942 and 2944-8376
2944	1-2943 and 2945-8376
2945	1-2944 and 2946-8376
2946	1-2945 and 2947-8376
2947	1-2946 and 2948-8376
2948	1-2947 and 2949-8376
2949	1-2948 and 2950-8376
2950	1-2949 and 2951-8376
2951	1-2950 and 2952-8376
2952	1-2951 and 2953-8376
2953	1-2952 and 2954-8376
2954	1-2953 and 2955-8376
2955	1-2954 and 2956-8376
2956	1-2955 and 2957-8376
2957	1-2956 and 2958-8376
2958	1-2957 and 2959-8376
2959	1-2958 and 2960-8376
2960	1-2959 and 2961-8376
2961	1-2960 and 2962-8376
2962	1-2961 and 2963-8376
2963	1-2962 and 2964-8376
2964	1-2963 and 2965-8376
2965	1-2964 and 2966-8376
2966	1-2965 and 2967-8376
2967	1-2966 and 2968-8376
2968	1-2967 and 2969-8376
2969	1-2968 and 2970-8376
2970	1-2969 and 2971-8376
2971	1-2970 and 2972-8376
2972	1-2971 and 2973-8376
2973	1-2972 and 2974-8376
2974	1-2973 and 2975-8376
2975	1-2974 and 2976-8376
2976	1-2975 and 2977-8376
2977	1-2976 and 2978-8376
2978	1-2977 and 2979-8376



2979	1-2978 and 2980-8376	3036	1-3035 and 3037-8376	3093	1-3092 and 3094-8376
2980	1-2979 and 2981-8376	3037	1-3036 and 3038-8376	3094	1-3093 and 3095-8376
2981	1-2980 and 2982-8376	3038	1-3037 and 3039-8376	3095	1-3094 and 3096-8376
2982	1-2981 and 2983-8376	3039	1-3038 and 3040-8376	3096	1-3095 and 3097-8376
2983	1-2982 and 2984-8376	3040	1-3039 and 3041-8376	3097	1-3096 and 3098-8376
2984	1-2983 and 2985-8376	3041	1-3040 and 3042-8376	3098	1-3097 and 3099-8376
2985	1-2984 and 2986-8376	3042	1-3041 and 3043-8376	3099	1-3098 and 3100-8376
2986	1-2985 and 2987-8376	3043	1-3042 and 3044-8376	3100	1-3099 and 3101-8376
2987	1-2986 and 2988-8376	3044	1-3043 and 3045-8376	3101	1-3100 and 3102-8376
2988	1-2987 and 2989-8376	3045	1-3044 and 3046-8376	3102	1-3101 and 3103-8376
2989	1-2988 and 2990-8376	3046	1-3045 and 3047-8376	3103	1-3102 and 3104-8376
2990	1-2989 and 2991-8376	3047	1-3046 and 3048-8376	3104	1-3103 and 3105-8376
2991	1-2990 and 2992-8376	3048	1-3047 and 3049-8376	3105	1-3104 and 3106-8376
2992	1-2991 and 2993-8376	3049	1-3048 and 3050-8376	3106	1-3105 and 3107-8376
2993	1-2992 and 2994-8376	3050	1-3049 and 3051-8376	3107	1-3106 and 3108-8376
2994	1-2993 and 2995-8376	3051	1-3050 and 3052-8376	3108	1-3107 and 3109-8376
2995	1-2994 and 2996-8376	3052	1-3051 and 3053-8376	3109	1-3108 and 3110-8376
2996	1-2995 and 2997-8376	3053	1-3052 and 3054-8376	3110	1-3109 and 3111-8376
2997	1-2996 and 2998-8376	3054	1-3053 and 3055-8376	3111	1-3110 and 3112-8376
2998	1-2997 and 2999-8376	3055	1-3054 and 3056-8376	3112	1-3111 and 3113-8376
2999	1-2998 and 3000-8376	3056	1-3055 and 3057-8376	3113	1-3112 and 3114-8376
3000	1-2999 and 3001-8376	3057	1-3056 and 3058-8376	3114	1-3113 and 3115-8376
3001	1-3000 and 3002-8376	3058	1-3057 and 3059-8376	3115	1-3114 and 3116-8376
3002	1-3001 and 3003-8376	3059	1-3058 and 3060-8376	3116	1-3115 and 3117-8376
3003	1-3002 and 3004-8376	3060	1-3059 and 3061-8376	3117	1-3116 and 3118-8376
3004	1-3003 and 3005-8376	3061	1-3060 and 3062-8376	3118	1-3117 and 3119-8376
3005	1-3004 and 3006-8376	3062	1-3061 and 3063-8376	3119	1-3118 and 3120-8376
3006	1-3005 and 3007-8376	3063	1-3062 and 3064-8376	3120	1-3119 and 3121-8376
3007	1-3006 and 3008-8376	3064	1-3063 and 3065-8376	3121	1-3120 and 3122-8376
3008	1-3007 and 3009-8376	3065	1-3064 and 3066-8376	3122	1-3121 and 3123-8376
3009	1-3008 and 3010-8376	3066	1-3065 and 3067-8376	3123	1-3122 and 3124-8376
3010	1-3009 and 3011-8376	3067	1-3066 and 3068-8376	3124	1-3123 and 3125-8376
3011	1-3010 and 3012-8376	3068	1-3067 and 3069-8376	3125	1-3124 and 3126-8376
3012	1-3011 and 3013-8376	3069	1-3068 and 3070-8376	3126	1-3125 and 3127-8376
3013	1-3012 and 3014-8376	3070	1-3069 and 3071-8376	3127	1-3126 and 3128-8376
3014	1-3013 and 3015-8376	3071	1-3070 and 3072-8376	3128	1-3127 and 3129-8376
3015	1-3014 and 3016-8376	3072	1-3071 and 3073-8376	3129	1-3128 and 3130-8376
3016	1-3015 and 3017-8376	3073	1-3072 and 3074-8376	3130	1-3129 and 3131-8376
3017	1-3016 and 3018-8376	3074	1-3073 and 3075-8376	3131	1-3130 and 3132-8376
3018	1-3017 and 3019-8376	3075	1-3074 and 3076-8376	3132	1-3131 and 3133-8376
3019	1-3018 and 3020-8376	3076	1-3075 and 3077-8376	3133	1-3132 and 3134-8376
3020	1-3019 and 3021-8376	3077	1-3076 and 3078-8376	3134	1-3133 and 3135-8376
3021	1-3020 and 3022-8376	3078	1-3077 and 3079-8376	3135	1-3134 and 3136-8376
3022	1-3021 and 3023-8376	3079	1-3078 and 3080-8376	3136	1-3135 and 3137-8376
3023	1-3022 and 3024-8376	3080	1-3079 and 3081-8376	3137	1-3136 and 3138-8376
3024	1-3023 and 3025-8376	3081	1-3080 and 3082-8376	3138	1-3137 and 3139-8376
3025	1-3024 and 3026-8376	3082	1-3081 and 3083-8376	3139	1-3138 and 3140-8376
3026	1-3025 and 3027-8376	3083	1-3082 and 3084-8376	3140	1-3139 and 3141-8376
3027	1-3026 and 3028-8376	3084	1-3083 and 3085-8376	3141	1-3140 and 3142-8376
3028	1-3027 and 3029-8376	3085	1-3084 and 3086-8376	3142	1-3141 and 3143-8376
3029	1-3028 and 3030-8376	3086	1-3085 and 3087-8376	3143	1-3142 and 3144-8376
3030	1-3029 and 3031-8376	3087	1-3086 and 3088-8376	3144	1-3143 and 3145-8376
3031	1-3030 and 3032-8376	3088	1-3087 and 3089-8376	3145	1-3144 and 3146-8376
3032	1-3031 and 3033-8376	3089	1-3088 and 3090-8376	3146	1-3145 and 3147-8376
3033	1-3032 and 3034-8376	3090	1-3089 and 3091-8376	3147	1-3146 and 3148-8376
3034	1-3033 and 3035-8376	3091	1-3090 and 3092-8376	3148	1-3147 and 3149-8376
3035	1-3034 and 3036-8376	3092	1-3091 and 3093-8376	3149	1-3148 and 3150-8376



3150	1-3149 and 3151-8376	3207	1-3206 and 3208-8376	3264	1-3263 and 3265-8376
3151	1-3150 and 3152-8376	3208	1-3207 and 3209-8376	3265	1-3264 and 3266-8376
3152	1-3151 and 3153-8376	3209	1-3208 and 3210-8376	3266	1-3265 and 3267-8376
3153	1-3152 and 3154-8376	3210	1-3209 and 3211-8376	3267	1-3266 and 3268-8376
3154	1-3153 and 3155-8376	3211	1-3210 and 3212-8376	3268	1-3267 and 3269-8376
3155	1-3154 and 3156-8376	3212	1-3211 and 3213-8376	3269	1-3268 and 3270-8376
3156	1-3155 and 3157-8376	3213	1-3212 and 3214-8376	3270	1-3269 and 3271-8376
3157	1-3156 and 3158-8376	3214	1-3213 and 3215-8376	3271	1-3270 and 3272-8376
3158	1-3157 and 3159-8376	3215	1-3214 and 3216-8376	3272	1-3271 and 3273-8376
3159	1-3158 and 3160-8376	3216	1-3215 and 3217-8376	3273	1-3272 and 3274-8376
3160	1-3159 and 3161-8376	3217	1-3216 and 3218-8376	3274	1-3273 and 3275-8376
3161	1-3160 and 3162-8376	3218	1-3217 and 3219-8376	3275	1-3274 and 3276-8376
3162	1-3161 and 3163-8376	3219	1-3218 and 3220-8376	3276	1-3275 and 3277-8376
3163	1-3162 and 3164-8376	3220	1-3219 and 3221-8376	3277	1-3276 and 3278-8376
3164	1-3163 and 3165-8376	3221	1-3220 and 3222-8376	3278	1-3277 and 3279-8376
3165	1-3164 and 3166-8376	3222	1-3221 and 3223-8376	3279	1-3278 and 3280-8376
3166	1-3165 and 3167-8376	3223	1-3222 and 3224-8376	3280	1-3279 and 3281-8376
3167	1-3166 and 3168-8376	3224	1-3223 and 3225-8376	3281	1-3280 and 3282-8376
3168	1-3167 and 3169-8376	3225	1-3224 and 3226-8376	3282	1-3281 and 3283-8376
3169	1-3168 and 3170-8376	3226	1-3225 and 3227-8376	3283	1-3282 and 3284-8376
3170	1-3169 and 3171-8376	3227	1-3226 and 3228-8376	3284	1-3283 and 3285-8376
3171	1-3170 and 3172-8376	3228	1-3227 and 3229-8376	3285	1-3284 and 3286-8376
3172	1-3171 and 3173-8376	3229	1-3228 and 3230-8376	3286	1-3285 and 3287-8376
3173	1-3172 and 3174-8376	3230	1-3229 and 3231-8376	3287	1-3286 and 3288-8376
3174	1-3173 and 3175-8376	3231	1-3230 and 3232-8376	3288	1-3287 and 3289-8376
3175	1-3174 and 3176-8376	3232	1-3231 and 3233-8376	3289	1-3288 and 3290-8376
3176	1-3175 and 3177-8376	3233	1-3232 and 3234-8376	3290	1-3289 and 3291-8376
3177	1-3176 and 3178-8376	3234	1-3233 and 3235-8376	3291	1-3290 and 3292-8376
3178	1-3177 and 3179-8376	3235	1-3234 and 3236-8376	3292	1-3291 and 3293-8376
3179	1-3178 and 3180-8376	3236	1-3235 and 3237-8376	3293	1-3292 and 3294-8376
3180	1-3179 and 3181-8376	3237	1-3236 and 3238-8376	3294	1-3293 and 3295-8376
3181	1-3180 and 3182-8376	3238	1-3237 and 3239-8376	3295	1-3294 and 3296-8376
3182	1-3181 and 3183-8376	3239	1-3238 and 3240-8376	3296	1-3295 and 3297-8376
3183	1-3182 and 3184-8376	3240	1-3239 and 3241-8376	3297	1-3296 and 3298-8376
3184	1-3183 and 3185-8376	3241	1-3240 and 3242-8376	3298	1-3297 and 3299-8376
3185	1-3184 and 3186-8376	3242	1-3241 and 3243-8376	3299	1-3298 and 3300-8376
3186	1-3185 and 3187-8376	3243	1-3242 and 3244-8376	3300	1-3299 and 3301-8376
3187	1-3186 and 3188-8376	3244	1-3243 and 3245-8376	3301	1-3300 and 3302-8376
3188	1-3187 and 3189-8376	3245	1-3244 and 3246-8376	3302	1-3301 and 3303-8376
3189	1-3188 and 3190-8376	3246	1-3245 and 3247-8376	3303	1-3302 and 3304-8376
3190	1-3189 and 3191-8376	3247	1-3246 and 3248-8376	3304	1-3303 and 3305-8376
3191	1-3190 and 3192-8376	3248	1-3247 and 3249-8376	3305	1-3304 and 3306-8376
3192	1-3191 and 3193-8376	3249	1-3248 and 3250-8376	3306	1-3305 and 3307-8376
3193	1-3192 and 3194-8376	3250	1-3249 and 3251-8376	3307	1-3306 and 3308-8376
3194	1-3193 and 3195-8376	3251	1-3250 and 3252-8376	3308	1-3307 and 3309-8376
3195	1-3194 and 3196-8376	3252	1-3251 and 3253-8376	3309	1-3308 and 3310-8376
3196	1-3195 and 3197-8376	3253	1-3252 and 3254-8376	3310	1-3309 and 3311-8376
3197	1-3196 and 3198-8376	3254	1-3253 and 3255-8376	3311	1-3310 and 3312-8376
3198	1-3197 and 3199-8376	3255	1-3254 and 3256-8376	3312	1-3311 and 3313-8376
3199	1-3198 and 3200-8376	3256	1-3255 and 3257-8376	3313	1-3312 and 3314-8376
3200	1-3199 and 3201-8376	3257	1-3256 and 3258-8376	3314	1-3313 and 3315-8376
3201	1-3200 and 3202-8376	3258	1-3257 and 3259-8376	3315	1-3314 and 3316-8376
3202	1-3201 and 3203-8376	3259	1-3258 and 3260-8376	3316	1-3315 and 3317-8376
3203	1-3202 and 3204-8376	3260	1-3259 and 3261-8376	3317	1-3316 and 3318-8376
3204	1-3203 and 3205-8376	3261	1-3260 and 3262-8376	3318	1-3317 and 3319-8376
3205	1-3204 and 3206-8376	3262	1-3261 and 3263-8376	3319	1-3318 and 3320-8376
3206	1-3205 and 3207-8376	3263	1-3262 and 3264-8376	3320	1-3319 and 3321-8376

3321	1-3320 and 3322-8376
3322	1-3321 and 3323-8376
3323	1-3322 and 3324-8376
3324	1-3323 and 3325-8376
3325	1-3324 and 3326-8376
3326	1-3325 and 3327-8376
3327	1-3326 and 3328-8376
3328	1-3327 and 3329-8376
3329	1-3328 and 3330-8376
3330	1-3329 and 3331-8376
3331	1-3330 and 3332-8376
3332	1-3331 and 3333-8376
3333	1-3332 and 3334-8376
3334	1-3333 and 3335-8376
3335	1-3334 and 3336-8376
3336	1-3335 and 3337-8376
3337	1-3336 and 3338-8376
3338	1-3337 and 3339-8376
3339	1-3338 and 3340-8376
3340	1-3339 and 3341-8376
3341	1-3340 and 3342-8376
3342	1-3341 and 3343-8376
3343	1-3342 and 3344-8376
3344	1-3343 and 3345-8376
3345	1-3344 and 3346-8376
3346	1-3345 and 3347-8376
3347	1-3346 and 3348-8376
3348	1-3347 and 3349-8376
3349	1-3348 and 3350-8376
3350	1-3349 and 3351-8376
3351	1-3350 and 3352-8376
3352	1-3351 and 3353-8376
3353	1-3352 and 3354-8376
3354	1-3353 and 3355-8376
3355	1-3354 and 3356-8376
3356	1-3355 and 3357-8376
3357	1-3356 and 3358-8376
3358	1-3357 and 3359-8376
3359	1-3358 and 3360-8376
3360	1-3359 and 3361-8376
3361	1-3360 and 3362-8376
3362	1-3361 and 3363-8376
3363	1-3362 and 3364-8376
3364	1-3363 and 3365-8376
3365	1-3364 and 3366-8376
3366	1-3365 and 3367-8376
3367	1-3366 and 3368-8376
3368	1-3367 and 3369-8376
3369	1-3368 and 3370-8376
3370	1-3369 and 3371-8376
3371	1-3370 and 3372-8376
3372	1-3371 and 3373-8376
3373	1-3372 and 3374-8376
3374	1-3373 and 3375-8376
3375	1-3374 and 3376-8376
3376	1-3375 and 3377-8376
3377	1-3376 and 3378-8376

3378	1-3377 and 3379-8376
3379	1-3378 and 3380-8376
3380	1-3379 and 3381-8376
3381	1-3380 and 3382-8376
3382	1-3381 and 3383-8376
3383	1-3382 and 3384-8376
3384	1-3383 and 3385-8376
3385	1-3384 and 3386-8376
3386	1-3385 and 3387-8376
3387	1-3386 and 3388-8376
3388	1-3387 and 3389-8376
3389	1-3388 and 3390-8376
3390	1-3389 and 3391-8376
3391	1-3390 and 3392-8376
3392	1-3391 and 3393-8376
3393	1-3392 and 3394-8376
3394	1-3393 and 3395-8376
3395	1-3394 and 3396-8376
3396	1-3395 and 3397-8376
3397	1-3396 and 3398-8376
3398	1-3397 and 3399-8376
3399	1-3398 and 3400-8376
3400	1-3399 and 3401-8376
3401	1-3400 and 3402-8376
3402	1-3401 and 3403-8376
3403	1-3402 and 3404-8376
3404	1-3403 and 3405-8376
3405	1-3404 and 3406-8376
3406	1-3405 and 3407-8376
3407	1-3406 and 3408-8376
3408	1-3407 and 3409-8376
3409	1-3408 and 3410-8376
3410	1-3409 and 3411-8376
3411	1-3410 and 3412-8376
3412	1-3411 and 3413-8376
3413	1-3412 and 3414-8376
3414	1-3413 and 3415-8376
3415	1-3414 and 3416-8376
3416	1-3415 and 3417-8376
3417	1-3416 and 3418-8376
3418	1-3417 and 3419-8376
3419	1-3418 and 3420-8376
3420	1-3419 and 3421-8376
3421	1-3420 and 3422-8376
3422	1-3421 and 3423-8376
3423	1-3422 and 3424-8376
3424	1-3423 and 3425-8376
3425	1-3424 and 3426-8376
3426	1-3425 and 3427-8376
3427	1-3426 and 3428-8376
3428	1-3427 and 3429-8376
3429	1-3428 and 3430-8376
3430	1-3429 and 3431-8376
3431	1-3430 and 3432-8376
3432	1-3431 and 3433-8376
3433	1-3432 and 3434-8376
3434	1-3433 and 3435-8376

3435	1-3434 and 3436-8376
3436	1-3435 and 3437-8376
3437	1-3436 and 3438-8376
3438	1-3437 and 3439-8376
3439	1-3438 and 3440-8376
3440	1-3439 and 3441-8376
3441	1-3440 and 3442-8376
3442	1-3441 and 3443-8376
3443	1-3442 and 3444-8376
3444	1-3443 and 3445-8376
3445	1-3444 and 3446-8376
3446	1-3445 and 3447-8376
3447	1-3446 and 3448-8376
3448	1-3447 and 3449-8376
3449	1-3448 and 3450-8376
3450	1-3449 and 3451-8376
3451	1-3450 and 3452-8376
3452	1-3451 and 3453-8376
3453	1-3452 and 3454-8376
3454	1-3453 and 3455-8376
3455	1-3454 and 3456-8376
3456	1-3455 and 3457-8376
3457	1-3456 and 3458-8376
3458	1-3457 and 3459-8376
3459	1-3458 and 3460-8376
3460	1-3459 and 3461-8376
3461	1-3460 and 3462-8376
3462	1-3461 and 3463-8376
3463	1-3462 and 3464-8376
3464	1-3463 and 3465-8376
3465	1-3464 and 3466-8376
3466	1-3465 and 3467-8376
3467	1-3466 and 3468-8376
3468	1-3467 and 3469-8376
3469	1-3468 and 3470-8376
3470	1-3469 and 3471-8376
3471	1-3470 and 3472-8376
3472	1-3471 and 3473-8376
3473	1-3472 and 3474-8376
3474	1-3473 and 3475-8376
3475	1-3474 and 3476-8376
3476	1-3475 and 3477-8376
3477	1-3476 and 3478-8376
3478	1-3477 and 3479-8376
3479	1-3478 and 3480-8376
3480	1-3479 and 3481-8376
3481	1-3480 and 3482-8376
3482	1-3481 and 3483-8376
3483	1-3482 and 3484-8376
3484	1-3483 and 3485-8376
3485	1-3484 and 3486-8376
3486	1-3485 and 3487-8376
3487	1-3486 and 3488-8376
3488	1-3487 and 3489-8376
3489	1-3488 and 3490-8376
3490	1-3489 and 3491-8376
3491	1-3490 and 3492-8376

3492	1-3491 and 3493-8376	3549	1-3548 and 3550-8376	3606	1-3605 and 3607-8376
3493	1-3492 and 3494-8376	3550	1-3549 and 3551-8376	3607	1-3606 and 3608-8376
3494	1-3493 and 3495-8376	3551	1-3550 and 3552-8376	3608	1-3607 and 3609-8376
3495	1-3494 and 3496-8376	3552	1-3551 and 3553-8376	3609	1-3608 and 3610-8376
3496	1-3495 and 3497-8376	3553	1-3552 and 3554-8376	3610	1-3609 and 3611-8376
3497	1-3496 and 3498-8376	3554	1-3553 and 3555-8376	3611	1-3610 and 3612-8376
3498	1-3497 and 3499-8376	3555	1-3554 and 3556-8376	3612	1-3611 and 3613-8376
3499	1-3498 and 3500-8376	3556	1-3555 and 3557-8376	3613	1-3612 and 3614-8376
3500	1-3499 and 3501-8376	3557	1-3556 and 3558-8376	3614	1-3613 and 3615-8376
3501	1-3500 and 3502-8376	3558	1-3557 and 3559-8376	3615	1-3614 and 3616-8376
3502	1-3501 and 3503-8376	3559	1-3558 and 3560-8376	3616	1-3615 and 3617-8376
3503	1-3502 and 3504-8376	3560	1-3559 and 3561-8376	3617	1-3616 and 3618-8376
3504	1-3503 and 3505-8376	3561	1-3560 and 3562-8376	3618	1-3617 and 3619-8376
3505	1-3504 and 3506-8376	3562	1-3561 and 3563-8376	3619	1-3618 and 3620-8376
3506	1-3505 and 3507-8376	3563	1-3562 and 3564-8376	3620	1-3619 and 3621-8376
3507	1-3506 and 3508-8376	3564	1-3563 and 3565-8376	3621	1-3620 and 3622-8376
3508	1-3507 and 3509-8376	3565	1-3564 and 3566-8376	3622	1-3621 and 3623-8376
3509	1-3508 and 3510-8376	3566	1-3565 and 3567-8376	3623	1-3622 and 3624-8376
3510	1-3509 and 3511-8376	3567	1-3566 and 3568-8376	3624	1-3623 and 3625-8376
3511	1-3510 and 3512-8376	3568	1-3567 and 3569-8376	3625	1-3624 and 3626-8376
3512	1-3511 and 3513-8376	3569	1-3568 and 3570-8376	3626	1-3625 and 3627-8376
3513	1-3512 and 3514-8376	3570	1-3569 and 3571-8376	3627	1-3626 and 3628-8376
3514	1-3513 and 3515-8376	3571	1-3570 and 3572-8376	3628	1-3627 and 3629-8376
3515	1-3514 and 3516-8376	3572	1-3571 and 3573-8376	3629	1-3628 and 3630-8376
3516	1-3515 and 3517-8376	3573	1-3572 and 3574-8376	3630	1-3629 and 3631-8376
3517	1-3516 and 3518-8376	3574	1-3573 and 3575-8376	3631	1-3630 and 3632-8376
3518	1-3517 and 3519-8376	3575	1-3574 and 3576-8376	3632	1-3631 and 3633-8376
3519	1-3518 and 3520-8376	3576	1-3575 and 3577-8376	3633	1-3632 and 3634-8376
3520	1-3519 and 3521-8376	3577	1-3576 and 3578-8376	3634	1-3633 and 3635-8376
3521	1-3520 and 3522-8376	3578	1-3577 and 3579-8376	3635	1-3634 and 3636-8376
3522	1-3521 and 3523-8376	3579	1-3578 and 3580-8376	3636	1-3635 and 3637-8376
3523	1-3522 and 3524-8376	3580	1-3579 and 3581-8376	3637	1-3636 and 3638-8376
3524	1-3523 and 3525-8376	3581	1-3580 and 3582-8376	3638	1-3637 and 3639-8376
3525	1-3524 and 3526-8376	3582	1-3581 and 3583-8376	3639	1-3638 and 3640-8376
3526	1-3525 and 3527-8376	3583	1-3582 and 3584-8376	3640	1-3639 and 3641-8376
3527	1-3526 and 3528-8376	3584	1-3583 and 3585-8376	3641	1-3640 and 3642-8376
3528	1-3527 and 3529-8376	3585	1-3584 and 3586-8376	3642	1-3641 and 3643-8376
3529	1-3528 and 3530-8376	3586	1-3585 and 3587-8376	3643	1-3642 and 3644-8376
3530	1-3529 and 3531-8376	3587	1-3586 and 3588-8376	3644	1-3643 and 3645-8376
3531	1-3530 and 3532-8376	3588	1-3587 and 3589-8376	3645	1-3644 and 3646-8376
3532	1-3531 and 3533-8376	3589	1-3588 and 3590-8376	3646	1-3645 and 3647-8376
3533	1-3532 and 3534-8376	3590	1-3589 and 3591-8376	3647	1-3646 and 3648-8376
3534	1-3533 and 3535-8376	3591	1-3590 and 3592-8376	3648	1-3647 and 3649-8376
3535	1-3534 and 3536-8376	3592	1-3591 and 3593-8376	3649	1-3648 and 3650-8376
3536	1-3535 and 3537-8376	3593	1-3592 and 3594-8376	3650	1-3649 and 3651-8376
3537	1-3536 and 3538-8376	3594	1-3593 and 3595-8376	3651	1-3650 and 3652-8376
3538	1-3537 and 3539-8376	3595	1-3594 and 3596-8376	3652	1-3651 and 3653-8376
3539	1-3538 and 3540-8376	3596	1-3595 and 3597-8376	3653	1-3652 and 3654-8376
3540	1-3539 and 3541-8376	3597	1-3596 and 3598-8376	3654	1-3653 and 3655-8376
3541	1-3540 and 3542-8376	3598	1-3597 and 3599-8376	3655	1-3654 and 3656-8376
3542	1-3541 and 3543-8376	3599	1-3598 and 3600-8376	3656	1-3655 and 3657-8376
3543	1-3542 and 3544-8376	3600	1-3599 and 3601-8376	3657	1-3656 and 3658-8376
3544	1-3543 and 3545-8376	3601	1-3600 and 3602-8376	3658	1-3657 and 3659-8376
3545	1-3544 and 3546-8376	3602	1-3601 and 3603-8376	3659	1-3658 and 3660-8376
3546	1-3545 and 3547-8376	3603	1-3602 and 3604-8376	3660	1-3659 and 3661-8376
3547	1-3546 and 3548-8376	3604	1-3603 and 3605-8376	3661	1-3660 and 3662-8376
3548	1-3547 and 3549-8376	3605	1-3604 and 3606-8376	3662	1-3661 and 3663-8376

3663	1-3662 and 3664-8376	3720	1-3719 and 3721-8376	3777	1-3776 and 3778-8376
3664	1-3663 and 3665-8376	3721	1-3720 and 3722-8376	3778	1-3777 and 3779-8376
3665	1-3664 and 3666-8376	3722	1-3721 and 3723-8376	3779	1-3778 and 3780-8376
3666	1-3665 and 3667-8376	3723	1-3722 and 3724-8376	3780	1-3779 and 3781-8376
3667	1-3666 and 3668-8376	3724	1-3723 and 3725-8376	3781	1-3780 and 3782-8376
3668	1-3667 and 3669-8376	3725	1-3724 and 3726-8376	3782	1-3781 and 3783-8376
3669	1-3668 and 3670-8376	3726	1-3725 and 3727-8376	3783	1-3782 and 3784-8376
3670	1-3669 and 3671-8376	3727	1-3726 and 3728-8376	3784	1-3783 and 3785-8376
3671	1-3670 and 3672-8376	3728	1-3727 and 3729-8376	3785	1-3784 and 3786-8376
3672	1-3671 and 3673-8376	3729	1-3728 and 3730-8376	3786	1-3785 and 3787-8376
3673	1-3672 and 3674-8376	3730	1-3729 and 3731-8376	3787	1-3786 and 3788-8376
3674	1-3673 and 3675-8376	3731	1-3730 and 3732-8376	3788	1-3787 and 3789-8376
3675	1-3674 and 3676-8376	3732	1-3731 and 3733-8376	3789	1-3788 and 3790-8376
3676	1-3675 and 3677-8376	3733	1-3732 and 3734-8376	3790	1-3789 and 3791-8376
3677	1-3676 and 3678-8376	3734	1-3733 and 3735-8376	3791	1-3790 and 3792-8376
3678	1-3677 and 3679-8376	3735	1-3734 and 3736-8376	3792	1-3791 and 3793-8376
3679	1-3678 and 3680-8376	3736	1-3735 and 3737-8376	3793	1-3792 and 3794-8376
3680	1-3679 and 3681-8376	3737	1-3736 and 3738-8376	3794	1-3793 and 3795-8376
3681	1-3680 and 3682-8376	3738	1-3737 and 3739-8376	3795	1-3794 and 3796-8376
3682	1-3681 and 3683-8376	3739	1-3738 and 3740-8376	3796	1-3795 and 3797-8376
3683	1-3682 and 3684-8376	3740	1-3739 and 3741-8376	3797	1-3796 and 3798-8376
3684	1-3683 and 3685-8376	3741	1-3740 and 3742-8376	3798	1-3797 and 3799-8376
3685	1-3684 and 3686-8376	3742	1-3741 and 3743-8376	3799	1-3798 and 3800-8376
3686	1-3685 and 3687-8376	3743	1-3742 and 3744-8376	3800	1-3799 and 3801-8376
3687	1-3686 and 3688-8376	3744	1-3743 and 3745-8376	3801	1-3800 and 3802-8376
3688	1-3687 and 3689-8376	3745	1-3744 and 3746-8376	3802	1-3801 and 3803-8376
3689	1-3688 and 3690-8376	3746	1-3745 and 3747-8376	3803	1-3802 and 3804-8376
3690	1-3689 and 3691-8376	3747	1-3746 and 3748-8376	3804	1-3803 and 3805-8376
3691	1-3690 and 3692-8376	3748	1-3747 and 3749-8376	3805	1-3804 and 3806-8376
3692	1-3691 and 3693-8376	3749	1-3748 and 3750-8376	3806	1-3805 and 3807-8376
3693	1-3692 and 3694-8376	3750	1-3749 and 3751-8376	3807	1-3806 and 3808-8376
3694	1-3693 and 3695-8376	3751	1-3750 and 3752-8376	3808	1-3807 and 3809-8376
3695	1-3694 and 3696-8376	3752	1-3751 and 3753-8376	3809	1-3808 and 3810-8376
3696	1-3695 and 3697-8376	3753	1-3752 and 3754-8376	3810	1-3809 and 3811-8376
3697	1-3696 and 3698-8376	3754	1-3753 and 3755-8376	3811	1-3810 and 3812-8376
3698	1-3697 and 3699-8376	3755	1-3754 and 3756-8376	3812	1-3811 and 3813-8376
3699	1-3698 and 3700-8376	3756	1-3755 and 3757-8376	3813	1-3812 and 3814-8376
3700	1-3699 and 3701-8376	3757	1-3756 and 3758-8376	3814	1-3813 and 3815-8376
3701	1-3700 and 3702-8376	3758	1-3757 and 3759-8376	3815	1-3814 and 3816-8376
3702	1-3701 and 3703-8376	3759	1-3758 and 3760-8376	3816	1-3815 and 3817-8376
3703	1-3702 and 3704-8376	3760	1-3759 and 3761-8376	3817	1-3816 and 3818-8376
3704	1-3703 and 3705-8376	3761	1-3760 and 3762-8376	3818	1-3817 and 3819-8376
3705	1-3704 and 3706-8376	3762	1-3761 and 3763-8376	3819	1-3818 and 3820-8376
3706	1-3705 and 3707-8376	3763	1-3762 and 3764-8376	3820	1-3819 and 3821-8376
3707	1-3706 and 3708-8376	3764	1-3763 and 3765-8376	3821	1-3820 and 3822-8376
3708	1-3707 and 3709-8376	3765	1-3764 and 3766-8376	3822	1-3821 and 3823-8376
3709	1-3708 and 3710-8376	3766	1-3765 and 3767-8376	3823	1-3822 and 3824-8376
3710	1-3709 and 3711-8376	3767	1-3766 and 3768-8376	3824	1-3823 and 3825-8376
3711	1-3710 and 3712-8376	3768	1-3767 and 3769-8376	3825	1-3824 and 3826-8376
3712	1-3711 and 3713-8376	3769	1-3768 and 3770-8376	3826	1-3825 and 3827-8376
3713	1-3712 and 3714-8376	3770	1-3769 and 3771-8376	3827	1-3826 and 3828-8376
3714	1-3713 and 3715-8376	3771	1-3770 and 3772-8376	3828	1-3827 and 3829-8376
3715	1-3714 and 3716-8376	3772	1-3771 and 3773-8376	3829	1-3828 and 3830-8376
3716	1-3715 and 3717-8376	3773	1-3772 and 3774-8376	3830	1-3829 and 3831-8376
3717	1-3716 and 3718-8376	3774	1-3773 and 3775-8376	3831	1-3830 and 3832-8376
3718	1-3717 and 3719-8376	3775	1-3774 and 3776-8376	3832	1-3831 and 3833-8376
3719	1-3718 and 3720-8376	3776	1-3775 and 3777-8376	3833	1-3832 and 3834-8376

3834	1-3833 and 3835-8376
3835	1-3834 and 3836-8376
3836	1-3835 and 3837-8376
3837	1-3836 and 3838-8376
3838	1-3837 and 3839-8376
3839	1-3838 and 3840-8376
3840	1-3839 and 3841-8376
3841	1-3840 and 3842-8376
3842	1-3841 and 3843-8376
3843	1-3842 and 3844-8376
3844	1-3843 and 3845-8376
3845	1-3844 and 3846-8376
3846	1-3845 and 3847-8376
3847	1-3846 and 3848-8376
3848	1-3847 and 3849-8376
3849	1-3848 and 3850-8376
3850	1-3849 and 3851-8376
3851	1-3850 and 3852-8376
3852	1-3851 and 3853-8376
3853	1-3852 and 3854-8376
3854	1-3853 and 3855-8376
3855	1-3854 and 3856-8376
3856	1-3855 and 3857-8376
3857	1-3856 and 3858-8376
3858	1-3857 and 3859-8376
3859	1-3858 and 3860-8376
3860	1-3859 and 3861-8376
3861	1-3860 and 3862-8376
3862	1-3861 and 3863-8376
3863	1-3862 and 3864-8376
3864	1-3863 and 3865-8376
3865	1-3864 and 3866-8376
3866	1-3865 and 3867-8376
3867	1-3866 and 3868-8376
3868	1-3867 and 3869-8376
3869	1-3868 and 3870-8376
3870	1-3869 and 3871-8376
3871	1-3870 and 3872-8376
3872	1-3871 and 3873-8376
3873	1-3872 and 3874-8376
3874	1-3873 and 3875-8376
3875	1-3874 and 3876-8376
3876	1-3875 and 3877-8376
3877	1-3876 and 3878-8376
3878	1-3877 and 3879-8376
3879	1-3878 and 3880-8376
3880	1-3879 and 3881-8376
3881	1-3880 and 3882-8376
3882	1-3881 and 3883-8376
3883	1-3882 and 3884-8376
3884	1-3883 and 3885-8376
3885	1-3884 and 3886-8376
3886	1-3885 and 3887-8376
3887	1-3886 and 3888-8376
3888	1-3887 and 3889-8376
3889	1-3888 and 3890-8376
3890	1-3889 and 3891-8376

3891	1-3890 and 3892-8376
3892	1-3891 and 3893-8376
3893	1-3892 and 3894-8376
3894	1-3893 and 3895-8376
3895	1-3894 and 3896-8376
3896	1-3895 and 3897-8376
3897	1-3896 and 3898-8376
3898	1-3897 and 3899-8376
3899	1-3898 and 3900-8376
3900	1-3899 and 3901-8376
3901	1-3900 and 3902-8376
3902	1-3901 and 3903-8376
3903	1-3902 and 3904-8376
3904	1-3903 and 3905-8376
3905	1-3904 and 3906-8376
3906	1-3905 and 3907-8376
3907	1-3906 and 3908-8376
3908	1-3907 and 3909-8376
3909	1-3908 and 3910-8376
3910	1-3909 and 3911-8376
3911	1-3910 and 3912-8376
3912	1-3911 and 3913-8376
3913	1-3912 and 3914-8376
3914	1-3913 and 3915-8376
3915	1-3914 and 3916-8376
3916	1-3915 and 3917-8376
3917	1-3916 and 3918-8376
3918	1-3917 and 3919-8376
3919	1-3918 and 3920-8376
3920	1-3919 and 3921-8376
3921	1-3920 and 3922-8376
3922	1-3921 and 3923-8376
3923	1-3922 and 3924-8376
3924	1-3923 and 3925-8376
3925	1-3924 and 3926-8376
3926	1-3925 and 3927-8376
3927	1-3926 and 3928-8376
3928	1-3927 and 3929-8376
3929	1-3928 and 3930-8376
3930	1-3929 and 3931-8376
3931	1-3930 and 3932-8376
3932	1-3931 and 3933-8376
3933	1-3932 and 3934-8376
3934	1-3933 and 3935-8376
3935	1-3934 and 3936-8376
3936	1-3935 and 3937-8376
3937	1-3936 and 3938-8376
3938	1-3937 and 3939-8376
3939	1-3938 and 3940-8376
3940	1-3939 and 3941-8376
3941	1-3940 and 3942-8376
3942	1-3941 and 3943-8376
3943	1-3942 and 3944-8376
3944	1-3943 and 3945-8376
3945	1-3944 and 3946-8376
3946	1-3945 and 3947-8376
3947	1-3946 and 3948-8376

3948	1-3947 and 3949-8376
3949	1-3948 and 3950-8376
3950	1-3949 and 3951-8376
3951	1-3950 and 3952-8376
3952	1-3951 and 3953-8376
3953	1-3952 and 3954-8376
3954	1-3953 and 3955-8376
3955	1-3954 and 3956-8376
3956	1-3955 and 3957-8376
3957	1-3956 and 3958-8376
3958	1-3957 and 3959-8376
3959	1-3958 and 3960-8376
3960	1-3959 and 3961-8376
3961	1-3960 and 3962-8376
3962	1-3961 and 3963-8376
3963	1-3962 and 3964-8376
3964	1-3963 and 3965-8376
3965	1-3964 and 3966-8376
3966	1-3965 and 3967-8376
3967	1-3966 and 3968-8376
3968	1-3967 and 3969-8376
3969	1-3968 and 3970-8376
3970	1-3969 and 3971-8376
3971	1-3970 and 3972-8376
3972	1-3971 and 3973-8376
3973	1-3972 and 3974-8376
3974	1-3973 and 3975-8376
3975	1-3974 and 3976-8376
3976	1-3975 and 3977-8376
3977	1-3976 and 3978-8376
3978	1-3977 and 3979-8376
3979	1-3978 and 3980-8376
3980	1-3979 and 3981-8376
3981	1-3980 and 3982-8376
3982	1-3981 and 3983-8376
3983	1-3982 and 3984-8376
3984	1-3983 and 3985-8376
3985	1-3984 and 3986-8376
3986	1-3985 and 3987-8376
3987	1-3986 and 3988-8376
3988	1-3987 and 3989-8376
3989	1-3988 and 3990-8376
3990	1-3989 and 3991-8376
3991	1-3990 and 3992-8376
3992	1-3991 and 3993-8376
3993	1-3992 and 3994-8376
3994	1-3993 and 3995-8376
3995	1-3994 and 3996-8376
3996	1-3995 and 3997-8376
3997	1-3996 and 3998-8376
3998	1-3997 and 3999-8376
3999	1-3998 and 4000-8376
4000	1-3999 and 4001-8376
4001	1-4000 and 4002-8376
4002	1-4001 and 4003-8376
4003	1-4002 and 4004-8376
4004	1-4003 and 4005-8376

4005	1-4004 and 4006-8376
4006	1-4005 and 4007-8376
4007	1-4006 and 4008-8376
4008	1-4007 and 4009-8376
4009	1-4008 and 4010-8376
4010	1-4009 and 4011-8376
4011	1-4010 and 4012-8376
4012	1-4011 and 4013-8376
4013	1-4012 and 4014-8376
4014	1-4013 and 4015-8376
4015	1-4014 and 4016-8376
4016	1-4015 and 4017-8376
4017	1-4016 and 4018-8376
4018	1-4017 and 4019-8376
4019	1-4018 and 4020-8376
4020	1-4019 and 4021-8376
4021	1-4020 and 4022-8376
4022	1-4021 and 4023-8376
4023	1-4022 and 4024-8376
4024	1-4023 and 4025-8376
4025	1-4024 and 4026-8376
4026	1-4025 and 4027-8376
4027	1-4026 and 4028-8376
4028	1-4027 and 4029-8376
4029	1-4028 and 4030-8376
4030	1-4029 and 4031-8376
4031	1-4030 and 4032-8376
4032	1-4031 and 4033-8376
4033	1-4032 and 4034-8376
4034	1-4033 and 4035-8376
4035	1-4034 and 4036-8376
4036	1-4035 and 4037-8376
4037	1-4036 and 4038-8376
4038	1-4037 and 4039-8376
4039	1-4038 and 4040-8376
4040	1-4039 and 4041-8376
4041	1-4040 and 4042-8376
4042	1-4041 and 4043-8376
4043	1-4042 and 4044-8376
4044	1-4043 and 4045-8376
4045	1-4044 and 4046-8376
4046	1-4045 and 4047-8376
4047	1-4046 and 4048-8376
4048	1-4047 and 4049-8376
4049	1-4048 and 4050-8376
4050	1-4049 and 4051-8376
4051	1-4050 and 4052-8376
4052	1-4051 and 4053-8376
4053	1-4052 and 4054-8376
4054	1-4053 and 4055-8376
4055	1-4054 and 4056-8376
4056	1-4055 and 4057-8376
4057	1-4056 and 4058-8376
4058	1-4057 and 4059-8376
4059	1-4058 and 4060-8376
4060	1-4059 and 4061-8376
4061	1-4060 and 4062-8376

4062	1-4061 and 4063-8376
4063	1-4062 and 4064-8376
4064	1-4063 and 4065-8376
4065	1-4064 and 4066-8376
4066	1-4065 and 4067-8376
4067	1-4066 and 4068-8376
4068	1-4067 and 4069-8376
4069	1-4068 and 4070-8376
4070	1-4069 and 4071-8376
4071	1-4070 and 4072-8376
4072	1-4071 and 4073-8376
4073	1-4072 and 4074-8376
4074	1-4073 and 4075-8376
4075	1-4074 and 4076-8376
4076	1-4075 and 4077-8376
4077	1-4076 and 4078-8376
4078	1-4077 and 4079-8376
4079	1-4078 and 4080-8376
4080	1-4079 and 4081-8376
4081	1-4080 and 4082-8376
4082	1-4081 and 4083-8376
4083	1-4082 and 4084-8376
4084	1-4083 and 4085-8376
4085	1-4084 and 4086-8376
4086	1-4085 and 4087-8376
4087	1-4086 and 4088-8376
4088	1-4087 and 4089-8376
4089	1-4088 and 4090-8376
4090	1-4089 and 4091-8376
4091	1-4090 and 4092-8376
4092	1-4091 and 4093-8376
4093	1-4092 and 4094-8376
4094	1-4093 and 4095-8376
4095	1-4094 and 4096-8376
4096	1-4095 and 4097-8376
4097	1-4096 and 4098-8376
4098	1-4097 and 4099-8376
4099	1-4098 and 4100-8376
4100	1-4099 and 4101-8376
4101	1-4100 and 4102-8376
4102	1-4101 and 4103-8376
4103	1-4102 and 4104-8376
4104	1-4103 and 4105-8376
4105	1-4104 and 4106-8376
4106	1-4105 and 4107-8376
4107	1-4106 and 4108-8376
4108	1-4107 and 4109-8376
4109	1-4108 and 4110-8376
4110	1-4109 and 4111-8376
4111	1-4110 and 4112-8376
4112	1-4111 and 4113-8376
4113	1-4112 and 4114-8376
4114	1-4113 and 4115-8376
4115	1-4114 and 4116-8376
4116	1-4115 and 4117-8376
4117	1-4116 and 4118-8376
4118	1-4117 and 4119-8376

4119	1-4118 and 4120-8376
4120	1-4119 and 4121-8376
4121	1-4120 and 4122-8376
4122	1-4121 and 4123-8376
4123	1-4122 and 4124-8376
4124	1-4123 and 4125-8376
4125	1-4124 and 4126-8376
4126	1-4125 and 4127-8376
4127	1-4126 and 4128-8376
4128	1-4127 and 4129-8376
4129	1-4128 and 4130-8376
4130	1-4129 and 4131-8376
4131	1-4130 and 4132-8376
4132	1-4131 and 4133-8376
4133	1-4132 and 4134-8376
4134	1-4133 and 4135-8376
4135	1-4134 and 4136-8376
4136	1-4135 and 4137-8376
4137	1-4136 and 4138-8376
4138	1-4137 and 4139-8376
4139	1-4138 and 4140-8376
4140	1-4139 and 4141-8376
4141	1-4140 and 4142-8376
4142	1-4141 and 4143-8376
4143	1-4142 and 4144-8376
4144	1-4143 and 4145-8376
4145	1-4144 and 4146-8376
4146	1-4145 and 4147-8376
4147	1-4146 and 4148-8376
4148	1-4147 and 4149-8376
4149	1-4148 and 4150-8376
4150	1-4149 and 4151-8376
4151	1-4150 and 4152-8376
4152	1-4151 and 4153-8376
4153	1-4152 and 4154-8376
4154	1-4153 and 4155-8376
4155	1-4154 and 4156-8376
4156	1-4155 and 4157-8376
4157	1-4156 and 4158-8376
4158	1-4157 and 4159-8376
4159	1-4158 and 4160-8376
4160	1-4159 and 4161-8376
4161	1-4160 and 4162-8376
4162	1-4161 and 4163-8376
4163	1-4162 and 4164-8376
4164	1-4163 and 4165-8376
4165	1-4164 and 4166-8376
4166	1-4165 and 4167-8376
4167	1-4166 and 4168-8376
4168	1-4167 and 4169-8376
4169	1-4168 and 4170-8376
4170	1-4169 and 4171-8376
4171	1-4170 and 4172-8376
4172	1-4171 and 4173-8376
4173	1-4172 and 4174-8376
4174	1-4173 and 4175-8376
4175	1-4174 and 4176-8376

4176	1-4175 and 4177-8376	4233	1-4232 and 4234-8376	4290	1-4289 and 4291-8376
4177	1-4176 and 4178-8376	4234	1-4233 and 4235-8376	4291	1-4290 and 4292-8376
4178	1-4177 and 4179-8376	4235	1-4234 and 4236-8376	4292	1-4291 and 4293-8376
4179	1-4178 and 4180-8376	4236	1-4235 and 4237-8376	4293	1-4292 and 4294-8376
4180	1-4179 and 4181-8376	4237	1-4236 and 4238-8376	4294	1-4293 and 4295-8376
4181	1-4180 and 4182-8376	4238	1-4237 and 4239-8376	4295	1-4294 and 4296-8376
4182	1-4181 and 4183-8376	4239	1-4238 and 4240-8376	4296	1-4295 and 4297-8376
4183	1-4182 and 4184-8376	4240	1-4239 and 4241-8376	4297	1-4296 and 4298-8376
4184	1-4183 and 4185-8376	4241	1-4240 and 4242-8376	4298	1-4297 and 4299-8376
4185	1-4184 and 4186-8376	4242	1-4241 and 4243-8376	4299	1-4298 and 4300-8376
4186	1-4185 and 4187-8376	4243	1-4242 and 4244-8376	4300	1-4299 and 4301-8376
4187	1-4186 and 4188-8376	4244	1-4243 and 4245-8376	4301	1-4300 and 4302-8376
4188	1-4187 and 4189-8376	4245	1-4244 and 4246-8376	4302	1-4301 and 4303-8376
4189	1-4188 and 4190-8376	4246	1-4245 and 4247-8376	4303	1-4302 and 4304-8376
4190	1-4189 and 4191-8376	4247	1-4246 and 4248-8376	4304	1-4303 and 4305-8376
4191	1-4190 and 4192-8376	4248	1-4247 and 4249-8376	4305	1-4304 and 4306-8376
4192	1-4191 and 4193-8376	4249	1-4248 and 4250-8376	4306	1-4305 and 4307-8376
4193	1-4192 and 4194-8376	4250	1-4249 and 4251-8376	4307	1-4306 and 4308-8376
4194	1-4193 and 4195-8376	4251	1-4250 and 4252-8376	4308	1-4307 and 4309-8376
4195	1-4194 and 4196-8376	4252	1-4251 and 4253-8376	4309	1-4308 and 4310-8376
4196	1-4195 and 4197-8376	4253	1-4252 and 4254-8376	4310	1-4309 and 4311-8376
4197	1-4196 and 4198-8376	4254	1-4253 and 4255-8376	4311	1-4310 and 4312-8376
4198	1-4197 and 4199-8376	4255	1-4254 and 4256-8376	4312	1-4311 and 4313-8376
4199	1-4198 and 4200-8376	4256	1-4255 and 4257-8376	4313	1-4312 and 4314-8376
4200	1-4199 and 4201-8376	4257	1-4256 and 4258-8376	4314	1-4313 and 4315-8376
4201	1-4200 and 4202-8376	4258	1-4257 and 4259-8376	4315	1-4314 and 4316-8376
4202	1-4201 and 4203-8376	4259	1-4258 and 4260-8376	4316	1-4315 and 4317-8376
4203	1-4202 and 4204-8376	4260	1-4259 and 4261-8376	4317	1-4316 and 4318-8376
4204	1-4203 and 4205-8376	4261	1-4260 and 4262-8376	4318	1-4317 and 4319-8376
4205	1-4204 and 4206-8376	4262	1-4261 and 4263-8376	4319	1-4318 and 4320-8376
4206	1-4205 and 4207-8376	4263	1-4262 and 4264-8376	4320	1-4319 and 4321-8376
4207	1-4206 and 4208-8376	4264	1-4263 and 4265-8376	4321	1-4320 and 4322-8376
4208	1-4207 and 4209-8376	4265	1-4264 and 4266-8376	4322	1-4321 and 4323-8376
4209	1-4208 and 4210-8376	4266	1-4265 and 4267-8376	4323	1-4322 and 4324-8376
4210	1-4209 and 4211-8376	4267	1-4266 and 4268-8376	4324	1-4323 and 4325-8376
4211	1-4210 and 4212-8376	4268	1-4267 and 4269-8376	4325	1-4324 and 4326-8376
4212	1-4211 and 4213-8376	4269	1-4268 and 4270-8376	4326	1-4325 and 4327-8376
4213	1-4212 and 4214-8376	4270	1-4269 and 4271-8376	4327	1-4326 and 4328-8376
4214	1-4213 and 4215-8376	4271	1-4270 and 4272-8376	4328	1-4327 and 4329-8376
4215	1-4214 and 4216-8376	4272	1-4271 and 4273-8376	4329	1-4328 and 4330-8376
4216	1-4215 and 4217-8376	4273	1-4272 and 4274-8376	4330	1-4329 and 4331-8376
4217	1-4216 and 4218-8376	4274	1-4273 and 4275-8376	4331	1-4330 and 4332-8376
4218	1-4217 and 4219-8376	4275	1-4274 and 4276-8376	4332	1-4331 and 4333-8376
4219	1-4218 and 4220-8376	4276	1-4275 and 4277-8376	4333	1-4332 and 4334-8376
4220	1-4219 and 4221-8376	4277	1-4276 and 4278-8376	4334	1-4333 and 4335-8376
4221	1-4220 and 4222-8376	4278	1-4277 and 4279-8376	4335	1-4334 and 4336-8376
4222	1-4221 and 4223-8376	4279	1-4278 and 4280-8376	4336	1-4335 and 4337-8376
4223	1-4222 and 4224-8376	4280	1-4279 and 4281-8376	4337	1-4336 and 4338-8376
4224	1-4223 and 4225-8376	4281	1-4280 and 4282-8376	4338	1-4337 and 4339-8376
4225	1-4224 and 4226-8376	4282	1-4281 and 4283-8376	4339	1-4338 and 4340-8376
4226	1-4225 and 4227-8376	4283	1-4282 and 4284-8376	4340	1-4339 and 4341-8376
4227	1-4226 and 4228-8376	4284	1-4283 and 4285-8376	4341	1-4340 and 4342-8376
4228	1-4227 and 4229-8376	4285	1-4284 and 4286-8376	4342	1-4341 and 4343-8376
4229	1-4228 and 4230-8376	4286	1-4285 and 4287-8376	4343	1-4342 and 4344-8376
4230	1-4229 and 4231-8376	4287	1-4286 and 4288-8376	4344	1-4343 and 4345-8376
4231	1-4230 and 4232-8376	4288	1-4287 and 4289-8376	4345	1-4344 and 4346-8376
4232	1-4231 and 4233-8376	4289	1-4288 and 4290-8376	4346	1-4345 and 4347-8376



4347	1-4346 and 4348-8376	4404	1-4403 and 4405-8376	4461	1-4460 and 4462-8376
4348	1-4347 and 4349-8376	4405	1-4404 and 4406-8376	4462	1-4461 and 4463-8376
4349	1-4348 and 4350-8376	4406	1-4405 and 4407-8376	4463	1-4462 and 4464-8376
4350	1-4349 and 4351-8376	4407	1-4406 and 4408-8376	4464	1-4463 and 4465-8376
4351	1-4350 and 4352-8376	4408	1-4407 and 4409-8376	4465	1-4464 and 4466-8376
4352	1-4351 and 4353-8376	4409	1-4408 and 4410-8376	4466	1-4465 and 4467-8376
4353	1-4352 and 4354-8376	4410	1-4409 and 4411-8376	4467	1-4466 and 4468-8376
4354	1-4353 and 4355-8376	4411	1-4410 and 4412-8376	4468	1-4467 and 4469-8376
4355	1-4354 and 4356-8376	4412	1-4411 and 4413-8376	4469	1-4468 and 4470-8376
4356	1-4355 and 4357-8376	4413	1-4412 and 4414-8376	4470	1-4469 and 4471-8376
4357	1-4356 and 4358-8376	4414	1-4413 and 4415-8376	4471	1-4470 and 4472-8376
4358	1-4357 and 4359-8376	4415	1-4414 and 4416-8376	4472	1-4471 and 4473-8376
4359	1-4358 and 4360-8376	4416	1-4415 and 4417-8376	4473	1-4472 and 4474-8376
4360	1-4359 and 4361-8376	4417	1-4416 and 4418-8376	4474	1-4473 and 4475-8376
4361	1-4360 and 4362-8376	4418	1-4417 and 4419-8376	4475	1-4474 and 4476-8376
4362	1-4361 and 4363-8376	4419	1-4418 and 4420-8376	4476	1-4475 and 4477-8376
4363	1-4362 and 4364-8376	4420	1-4419 and 4421-8376	4477	1-4476 and 4478-8376
4364	1-4363 and 4365-8376	4421	1-4420 and 4422-8376	4478	1-4477 and 4479-8376
4365	1-4364 and 4366-8376	4422	1-4421 and 4423-8376	4479	1-4478 and 4480-8376
4366	1-4365 and 4367-8376	4423	1-4422 and 4424-8376	4480	1-4479 and 4481-8376
4367	1-4366 and 4368-8376	4424	1-4423 and 4425-8376	4481	1-4480 and 4482-8376
4368	1-4367 and 4369-8376	4425	1-4424 and 4426-8376	4482	1-4481 and 4483-8376
4369	1-4368 and 4370-8376	4426	1-4425 and 4427-8376	4483	1-4482 and 4484-8376
4370	1-4369 and 4371-8376	4427	1-4426 and 4428-8376	4484	1-4483 and 4485-8376
4371	1-4370 and 4372-8376	4428	1-4427 and 4429-8376	4485	1-4484 and 4486-8376
4372	1-4371 and 4373-8376	4429	1-4428 and 4430-8376	4486	1-4485 and 4487-8376
4373	1-4372 and 4374-8376	4430	1-4429 and 4431-8376	4487	1-4486 and 4488-8376
4374	1-4373 and 4375-8376	4431	1-4430 and 4432-8376	4488	1-4487 and 4489-8376
4375	1-4374 and 4376-8376	4432	1-4431 and 4433-8376	4489	1-4488 and 4490-8376
4376	1-4375 and 4377-8376	4433	1-4432 and 4434-8376	4490	1-4489 and 4491-8376
4377	1-4376 and 4378-8376	4434	1-4433 and 4435-8376	4491	1-4490 and 4492-8376
4378	1-4377 and 4379-8376	4435	1-4434 and 4436-8376	4492	1-4491 and 4493-8376
4379	1-4378 and 4380-8376	4436	1-4435 and 4437-8376	4493	1-4492 and 4494-8376
4380	1-4379 and 4381-8376	4437	1-4436 and 4438-8376	4494	1-4493 and 4495-8376
4381	1-4380 and 4382-8376	4438	1-4437 and 4439-8376	4495	1-4494 and 4496-8376
4382	1-4381 and 4383-8376	4439	1-4438 and 4440-8376	4496	1-4495 and 4497-8376
4383	1-4382 and 4384-8376	4440	1-4439 and 4441-8376	4497	1-4496 and 4498-8376
4384	1-4383 and 4385-8376	4441	1-4440 and 4442-8376	4498	1-4497 and 4499-8376
4385	1-4384 and 4386-8376	4442	1-4441 and 4443-8376	4499	1-4498 and 4500-8376
4386	1-4385 and 4387-8376	4443	1-4442 and 4444-8376	4500	1-4499 and 4501-8376
4387	1-4386 and 4388-8376	4444	1-4443 and 4445-8376	4501	1-4500 and 4502-8376
4388	1-4387 and 4389-8376	4445	1-4444 and 4446-8376	4502	1-4501 and 4503-8376
4389	1-4388 and 4390-8376	4446	1-4445 and 4447-8376	4503	1-4502 and 4504-8376
4390	1-4389 and 4391-8376	4447	1-4446 and 4448-8376	4504	1-4503 and 4505-8376
4391	1-4390 and 4392-8376	4448	1-4447 and 4449-8376	4505	1-4504 and 4506-8376
4392	1-4391 and 4393-8376	4449	1-4448 and 4450-8376	4506	1-4505 and 4507-8376
4393	1-4392 and 4394-8376	4450	1-4449 and 4451-8376	4507	1-4506 and 4508-8376
4394	1-4393 and 4395-8376	4451	1-4450 and 4452-8376	4508	1-4507 and 4509-8376
4395	1-4394 and 4396-8376	4452	1-4451 and 4453-8376	4509	1-4508 and 4510-8376
4396	1-4395 and 4397-8376	4453	1-4452 and 4454-8376	4510	1-4509 and 4511-8376
4397	1-4396 and 4398-8376	4454	1-4453 and 4455-8376	4511	1-4510 and 4512-8376
4398	1-4397 and 4399-8376	4455	1-4454 and 4456-8376	4512	1-4511 and 4513-8376
4399	1-4398 and 4400-8376	4456	1-4455 and 4457-8376	4513	1-4512 and 4514-8376
4400	1-4399 and 4401-8376	4457	1-4456 and 4458-8376	4514	1-4513 and 4515-8376
4401	1-4400 and 4402-8376	4458	1-4457 and 4459-8376	4515	1-4514 and 4516-8376
4402	1-4401 and 4403-8376	4459	1-4458 and 4460-8376	4516	1-4515 and 4517-8376
4403	1-4402 and 4404-8376	4460	1-4459 and 4461-8376	4517	1-4516 and 4518-8376



4518	1-4517 and 4519-8376	4575	1-4574 and 4576-8376	4632	1-4631 and 4633-8376
4519	1-4518 and 4520-8376	4576	1-4575 and 4577-8376	4633	1-4632 and 4634-8376
4520	1-4519 and 4521-8376	4577	1-4576 and 4578-8376	4634	1-4633 and 4635-8376
4521	1-4520 and 4522-8376	4578	1-4577 and 4579-8376	4635	1-4634 and 4636-8376
4522	1-4521 and 4523-8376	4579	1-4578 and 4580-8376	4636	1-4635 and 4637-8376
4523	1-4522 and 4524-8376	4580	1-4579 and 4581-8376	4637	1-4636 and 4638-8376
4524	1-4523 and 4525-8376	4581	1-4580 and 4582-8376	4638	1-4637 and 4639-8376
4525	1-4524 and 4526-8376	4582	1-4581 and 4583-8376	4639	1-4638 and 4640-8376
4526	1-4525 and 4527-8376	4583	1-4582 and 4584-8376	4640	1-4639 and 4641-8376
4527	1-4526 and 4528-8376	4584	1-4583 and 4585-8376	4641	1-4640 and 4642-8376
4528	1-4527 and 4529-8376	4585	1-4584 and 4586-8376	4642	1-4641 and 4643-8376
4529	1-4528 and 4530-8376	4586	1-4585 and 4587-8376	4643	1-4642 and 4644-8376
4530	1-4529 and 4531-8376	4587	1-4586 and 4588-8376	4644	1-4643 and 4645-8376
4531	1-4530 and 4532-8376	4588	1-4587 and 4589-8376	4645	1-4644 and 4646-8376
4532	1-4531 and 4533-8376	4589	1-4588 and 4590-8376	4646	1-4645 and 4647-8376
4533	1-4532 and 4534-8376	4590	1-4589 and 4591-8376	4647	1-4646 and 4648-8376
4534	1-4533 and 4535-8376	4591	1-4590 and 4592-8376	4648	1-4647 and 4649-8376
4535	1-4534 and 4536-8376	4592	1-4591 and 4593-8376	4649	1-4648 and 4650-8376
4536	1-4535 and 4537-8376	4593	1-4592 and 4594-8376	4650	1-4649 and 4651-8376
4537	1-4536 and 4538-8376	4594	1-4593 and 4595-8376	4651	1-4650 and 4652-8376
4538	1-4537 and 4539-8376	4595	1-4594 and 4596-8376	4652	1-4651 and 4653-8376
4539	1-4538 and 4540-8376	4596	1-4595 and 4597-8376	4653	1-4652 and 4654-8376
4540	1-4539 and 4541-8376	4597	1-4596 and 4598-8376	4654	1-4653 and 4655-8376
4541	1-4540 and 4542-8376	4598	1-4597 and 4599-8376	4655	1-4654 and 4656-8376
4542	1-4541 and 4543-8376	4599	1-4598 and 4600-8376	4656	1-4655 and 4657-8376
4543	1-4542 and 4544-8376	4600	1-4599 and 4601-8376	4657	1-4656 and 4658-8376
4544	1-4543 and 4545-8376	4601	1-4600 and 4602-8376	4658	1-4657 and 4659-8376
4545	1-4544 and 4546-8376	4602	1-4601 and 4603-8376	4659	1-4658 and 4660-8376
4546	1-4545 and 4547-8376	4603	1-4602 and 4604-8376	4660	1-4659 and 4661-8376
4547	1-4546 and 4548-8376	4604	1-4603 and 4605-8376	4661	1-4660 and 4662-8376
4548	1-4547 and 4549-8376	4605	1-4604 and 4606-8376	4662	1-4661 and 4663-8376
4549	1-4548 and 4550-8376	4606	1-4605 and 4607-8376	4663	1-4662 and 4664-8376
4550	1-4549 and 4551-8376	4607	1-4606 and 4608-8376	4664	1-4663 and 4665-8376
4551	1-4550 and 4552-8376	4608	1-4607 and 4609-8376	4665	1-4664 and 4666-8376
4552	1-4551 and 4553-8376	4609	1-4608 and 4610-8376	4666	1-4665 and 4667-8376
4553	1-4552 and 4554-8376	4610	1-4609 and 4611-8376	4667	1-4666 and 4668-8376
4554	1-4553 and 4555-8376	4611	1-4610 and 4612-8376	4668	1-4667 and 4669-8376
4555	1-4554 and 4556-8376	4612	1-4611 and 4613-8376	4669	1-4668 and 4670-8376
4556	1-4555 and 4557-8376	4613	1-4612 and 4614-8376	4670	1-4669 and 4671-8376
4557	1-4556 and 4558-8376	4614	1-4613 and 4615-8376	4671	1-4670 and 4672-8376
4558	1-4557 and 4559-8376	4615	1-4614 and 4616-8376	4672	1-4671 and 4673-8376
4559	1-4558 and 4560-8376	4616	1-4615 and 4617-8376	4673	1-4672 and 4674-8376
4560	1-4559 and 4561-8376	4617	1-4616 and 4618-8376	4674	1-4673 and 4675-8376
4561	1-4560 and 4562-8376	4618	1-4617 and 4619-8376	4675	1-4674 and 4676-8376
4562	1-4561 and 4563-8376	4619	1-4618 and 4620-8376	4676	1-4675 and 4677-8376
4563	1-4562 and 4564-8376	4620	1-4619 and 4621-8376	4677	1-4676 and 4678-8376
4564	1-4563 and 4565-8376	4621	1-4620 and 4622-8376	4678	1-4677 and 4679-8376
4565	1-4564 and 4566-8376	4622	1-4621 and 4623-8376	4679	1-4678 and 4680-8376
4566	1-4565 and 4567-8376	4623	1-4622 and 4624-8376	4680	1-4679 and 4681-8376
4567	1-4566 and 4568-8376	4624	1-4623 and 4625-8376	4681	1-4680 and 4682-8376
4568	1-4567 and 4569-8376	4625	1-4624 and 4626-8376	4682	1-4681 and 4683-8376
4569	1-4568 and 4570-8376	4626	1-4625 and 4627-8376	4683	1-4682 and 4684-8376
4570	1-4569 and 4571-8376	4627	1-4626 and 4628-8376	4684	1-4683 and 4685-8376
4571	1-4570 and 4572-8376	4628	1-4627 and 4629-8376	4685	1-4684 and 4686-8376
4572	1-4571 and 4573-8376	4629	1-4628 and 4630-8376	4686	1-4685 and 4687-8376
4573	1-4572 and 4574-8376	4630	1-4629 and 4631-8376	4687	1-4686 and 4688-8376
4574	1-4573 and 4575-8376	4631	1-4630 and 4632-8376	4688	1-4687 and 4689-8376

4689	1-4688 and 4690-8376
4690	1-4689 and 4691-8376
4691	1-4690 and 4692-8376
4692	1-4691 and 4693-8376
4693	1-4692 and 4694-8376
4694	1-4693 and 4695-8376
4695	1-4694 and 4696-8376
4696	1-4695 and 4697-8376
4697	1-4696 and 4698-8376
4698	1-4697 and 4699-8376
4699	1-4698 and 4700-8376
4700	1-4699 and 4701-8376
4701	1-4700 and 4702-8376
4702	1-4701 and 4703-8376
4703	1-4702 and 4704-8376
4704	1-4703 and 4705-8376
4705	1-4704 and 4706-8376
4706	1-4705 and 4707-8376
4707	1-4706 and 4708-8376
4708	1-4707 and 4709-8376
4709	1-4708 and 4710-8376
4710	1-4709 and 4711-8376
4711	1-4710 and 4712-8376
4712	1-4711 and 4713-8376
4713	1-4712 and 4714-8376
4714	1-4713 and 4715-8376
4715	1-4714 and 4716-8376
4716	1-4715 and 4717-8376
4717	1-4716 and 4718-8376
4718	1-4717 and 4719-8376
4719	1-4718 and 4720-8376
4720	1-4719 and 4721-8376
4721	1-4720 and 4722-8376
4722	1-4721 and 4723-8376
4723	1-4722 and 4724-8376
4724	1-4723 and 4725-8376
4725	1-4724 and 4726-8376
4726	1-4725 and 4727-8376
4727	1-4726 and 4728-8376
4728	1-4727 and 4729-8376
4729	1-4728 and 4730-8376
4730	1-4729 and 4731-8376
4731	1-4730 and 4732-8376
4732	1-4731 and 4733-8376
4733	1-4732 and 4734-8376
4734	1-4733 and 4735-8376
4735	1-4734 and 4736-8376
4736	1-4735 and 4737-8376
4737	1-4736 and 4738-8376
4738	1-4737 and 4739-8376
4739	1-4738 and 4740-8376
4740	1-4739 and 4741-8376
4741	1-4740 and 4742-8376
4742	1-4741 and 4743-8376
4743	1-4742 and 4744-8376
4744	1-4743 and 4745-8376
4745	1-4744 and 4746-8376

4746	1-4745 and 4747-8376
4747	1-4746 and 4748-8376
4748	1-4747 and 4749-8376
4749	1-4748 and 4750-8376
4750	1-4749 and 4751-8376
4751	1-4750 and 4752-8376
4752	1-4751 and 4753-8376
4753	1-4752 and 4754-8376
4754	1-4753 and 4755-8376
4755	1-4754 and 4756-8376
4756	1-4755 and 4757-8376
4757	1-4756 and 4758-8376
4758	1-4757 and 4759-8376
4759	1-4758 and 4760-8376
4760	1-4759 and 4761-8376
4761	1-4760 and 4762-8376
4762	1-4761 and 4763-8376
4763	1-4762 and 4764-8376
4764	1-4763 and 4765-8376
4765	1-4764 and 4766-8376
4766	1-4765 and 4767-8376
4767	1-4766 and 4768-8376
4768	1-4767 and 4769-8376
4769	1-4768 and 4770-8376
4770	1-4769 and 4771-8376
4771	1-4770 and 4772-8376
4772	1-4771 and 4773-8376
4773	1-4772 and 4774-8376
4774	1-4773 and 4775-8376
4775	1-4774 and 4776-8376
4776	1-4775 and 4777-8376
4777	1-4776 and 4778-8376
4778	1-4777 and 4779-8376
4779	1-4778 and 4780-8376
4780	1-4779 and 4781-8376
4781	1-4780 and 4782-8376
4782	1-4781 and 4783-8376
4783	1-4782 and 4784-8376
4784	1-4783 and 4785-8376
4785	1-4784 and 4786-8376
4786	1-4785 and 4787-8376
4787	1-4786 and 4788-8376
4788	1-4787 and 4789-8376
4789	1-4788 and 4790-8376
4790	1-4789 and 4791-8376
4791	1-4790 and 4792-8376
4792	1-4791 and 4793-8376
4793	1-4792 and 4794-8376
4794	1-4793 and 4795-8376
4795	1-4794 and 4796-8376
4796	1-4795 and 4797-8376
4797	1-4796 and 4798-8376
4798	1-4797 and 4799-8376
4799	1-4798 and 4800-8376
4800	1-4799 and 4801-8376
4801	1-4800 and 4802-8376
4802	1-4801 and 4803-8376

4803	1-4802 and 4804-8376
4804	1-4803 and 4805-8376
4805	1-4804 and 4806-8376
4806	1-4805 and 4807-8376
4807	1-4806 and 4808-8376
4808	1-4807 and 4809-8376
4809	1-4808 and 4810-8376
4810	1-4809 and 4811-8376
4811	1-4810 and 4812-8376
4812	1-4811 and 4813-8376
4813	1-4812 and 4814-8376
4814	1-4813 and 4815-8376
4815	1-4814 and 4816-8376
4816	1-4815 and 4817-8376
4817	1-4816 and 4818-8376
4818	1-4817 and 4819-8376
4819	1-4818 and 4820-8376
4820	1-4819 and 4821-8376
4821	1-4820 and 4822-8376
4822	1-4821 and 4823-8376
4823	1-4822 and 4824-8376
4824	1-4823 and 4825-8376
4825	1-4824 and 4826-8376
4826	1-4825 and 4827-8376
4827	1-4826 and 4828-8376
4828	1-4827 and 4829-8376
4829	1-4828 and 4830-8376
4830	1-4829 and 4831-8376
4831	1-4830 and 4832-8376
4832	1-4831 and 4833-8376
4833	1-4832 and 4834-8376
4834	1-4833 and 4835-8376
4835	1-4834 and 4836-8376
4836	1-4835 and 4837-8376
4837	1-4836 and 4838-8376
4838	1-4837 and 4839-8376
4839	1-4838 and 4840-8376
4840	1-4839 and 4841-8376
4841	1-4840 and 4842-8376
4842	1-4841 and 4843-8376
4843	1-4842 and 4844-8376
4844	1-4843 and 4845-8376
4845	1-4844 and 4846-8376
4846	1-4845 and 4847-8376
4847	1-4846 and 4848-8376
4848	1-4847 and 4849-8376
4849	1-4848 and 4850-8376
4850	1-4849 and 4851-8376
4851	1-4850 and 4852-8376
4852	1-4851 and 4853-8376
4853	1-4852 and 4854-8376
4854	1-4853 and 4855-8376
4855	1-4854 and 4856-8376
4856	1-4855 and 4857-8376
4857	1-4856 and 4858-8376
4858	1-4857 and 4859-8376
4859	1-4858 and 4860-8376

4860	1-4859 and 4861-8376
4861	1-4860 and 4862-8376
4862	1-4861 and 4863-8376
4863	1-4862 and 4864-8376
4864	1-4863 and 4865-8376
4865	1-4864 and 4866-8376
4866	1-4865 and 4867-8376
4867	1-4866 and 4868-8376
4868	1-4867 and 4869-8376
4869	1-4868 and 4870-8376
4870	1-4869 and 4871-8376
4871	1-4870 and 4872-8376
4872	1-4871 and 4873-8376
4873	1-4872 and 4874-8376
4874	1-4873 and 4875-8376
4875	1-4874 and 4876-8376
4876	1-4875 and 4877-8376
4877	1-4876 and 4878-8376
4878	1-4877 and 4879-8376
4879	1-4878 and 4880-8376
4880	1-4879 and 4881-8376
4881	1-4880 and 4882-8376
4882	1-4881 and 4883-8376
4883	1-4882 and 4884-8376
4884	1-4883 and 4885-8376
4885	1-4884 and 4886-8376
4886	1-4885 and 4887-8376
4887	1-4886 and 4888-8376
4888	1-4887 and 4889-8376
4889	1-4888 and 4890-8376
4890	1-4889 and 4891-8376
4891	1-4890 and 4892-8376
4892	1-4891 and 4893-8376
4893	1-4892 and 4894-8376
4894	1-4893 and 4895-8376
4895	1-4894 and 4896-8376
4896	1-4895 and 4897-8376
4897	1-4896 and 4898-8376
4898	1-4897 and 4899-8376
4899	1-4898 and 4900-8376
4900	1-4899 and 4901-8376
4901	1-4900 and 4902-8376
4902	1-4901 and 4903-8376
4903	1-4902 and 4904-8376
4904	1-4903 and 4905-8376
4905	1-4904 and 4906-8376
4906	1-4905 and 4907-8376
4907	1-4906 and 4908-8376
4908	1-4907 and 4909-8376
4909	1-4908 and 4910-8376
4910	1-4909 and 4911-8376
4911	1-4910 and 4912-8376
4912	1-4911 and 4913-8376
4913	1-4912 and 4914-8376
4914	1-4913 and 4915-8376
4915	1-4914 and 4916-8376
4916	1-4915 and 4917-8376

4917	1-4916 and 4918-8376
4918	1-4917 and 4919-8376
4919	1-4918 and 4920-8376
4920	1-4919 and 4921-8376
4921	1-4920 and 4922-8376
4922	1-4921 and 4923-8376
4923	1-4922 and 4924-8376
4924	1-4923 and 4925-8376
4925	1-4924 and 4926-8376
4926	1-4925 and 4927-8376
4927	1-4926 and 4928-8376
4928	1-4927 and 4929-8376
4929	1-4928 and 4930-8376
4930	1-4929 and 4931-8376
4931	1-4930 and 4932-8376
4932	1-4931 and 4933-8376
4933	1-4932 and 4934-8376
4934	1-4933 and 4935-8376
4935	1-4934 and 4936-8376
4936	1-4935 and 4937-8376
4937	1-4936 and 4938-8376
4938	1-4937 and 4939-8376
4939	1-4938 and 4940-8376
4940	1-4939 and 4941-8376
4941	1-4940 and 4942-8376
4942	1-4941 and 4943-8376
4943	1-4942 and 4944-8376
4944	1-4943 and 4945-8376
4945	1-4944 and 4946-8376
4946	1-4945 and 4947-8376
4947	1-4946 and 4948-8376
4948	1-4947 and 4949-8376
4949	1-4948 and 4950-8376
4950	1-4949 and 4951-8376
4951	1-4950 and 4952-8376
4952	1-4951 and 4953-8376
4953	1-4952 and 4954-8376
4954	1-4953 and 4955-8376
4955	1-4954 and 4956-8376
4956	1-4955 and 4957-8376
4957	1-4956 and 4958-8376
4958	1-4957 and 4959-8376
4959	1-4958 and 4960-8376
4960	1-4959 and 4961-8376
4961	1-4960 and 4962-8376
4962	1-4961 and 4963-8376
4963	1-4962 and 4964-8376
4964	1-4963 and 4965-8376
4965	1-4964 and 4966-8376
4966	1-4965 and 4967-8376
4967	1-4966 and 4968-8376
4968	1-4967 and 4969-8376
4969	1-4968 and 4970-8376
4970	1-4969 and 4971-8376
4971	1-4970 and 4972-8376
4972	1-4971 and 4973-8376
4973	1-4972 and 4974-8376

4974	1-4973 and 4975-8376
4975	1-4974 and 4976-8376
4976	1-4975 and 4977-8376
4977	1-4976 and 4978-8376
4978	1-4977 and 4979-8376
4979	1-4978 and 4980-8376
4980	1-4979 and 4981-8376
4981	1-4980 and 4982-8376
4982	1-4981 and 4983-8376
4983	1-4982 and 4984-8376
4984	1-4983 and 4985-8376
4985	1-4984 and 4986-8376
4986	1-4985 and 4987-8376
4987	1-4986 and 4988-8376
4988	1-4987 and 4989-8376
4989	1-4988 and 4990-8376
4990	1-4989 and 4991-8376
4991	1-4990 and 4992-8376
4992	1-4991 and 4993-8376
4993	1-4992 and 4994-8376
4994	1-4993 and 4995-8376
4995	1-4994 and 4996-8376
4996	1-4995 and 4997-8376
4997	1-4996 and 4998-8376
4998	1-4997 and 4999-8376
4999	1-4998 and 5000-8376
5000	1-4999 and 5001-8376
5001	1-5000 and 5002-8376
5002	1-5001 and 5003-8376
5003	1-5002 and 5004-8376
5004	1-5003 and 5005-8376
5005	1-5004 and 5006-8376
5006	1-5005 and 5007-8376
5007	1-5006 and 5008-8376
5008	1-5007 and 5009-8376
5009	1-5008 and 5010-8376
5010	1-5009 and 5011-8376
5011	1-5010 and 5012-8376
5012	1-5011 and 5013-8376
5013	1-5012 and 5014-8376
5014	1-5013 and 5015-8376
5015	1-5014 and 5016-8376
5016	1-5015 and 5017-8376
5017	1-5016 and 5018-8376
5018	1-5017 and 5019-8376
5019	1-5018 and 5020-8376
5020	1-5019 and 5021-8376
5021	1-5020 and 5022-8376
5022	1-5021 and 5023-8376
5023	1-5022 and 5024-8376
5024	1-5023 and 5025-8376
5025	1-5024 and 5026-8376
5026	1-5025 and 5027-8376
5027	1-5026 and 5028-8376
5028	1-5027 and 5029-8376
5029	1-5028 and 5030-8376
5030	1-5029 and 5031-8376

5031	1-5030 and 5032-8376
5032	1-5031 and 5033-8376
5033	1-5032 and 5034-8376
5034	1-5033 and 5035-8376
5035	1-5034 and 5036-8376
5036	1-5035 and 5037-8376
5037	1-5036 and 5038-8376
5038	1-5037 and 5039-8376
5039	1-5038 and 5040-8376
5040	1-5039 and 5041-8376
5041	1-5040 and 5042-8376
5042	1-5041 and 5043-8376
5043	1-5042 and 5044-8376
5044	1-5043 and 5045-8376
5045	1-5044 and 5046-8376
5046	1-5045 and 5047-8376
5047	1-5046 and 5048-8376
5048	1-5047 and 5049-8376
5049	1-5048 and 5050-8376
5050	1-5049 and 5051-8376
5051	1-5050 and 5052-8376
5052	1-5051 and 5053-8376
5053	1-5052 and 5054-8376
5054	1-5053 and 5055-8376
5055	1-5054 and 5056-8376
5056	1-5055 and 5057-8376
5057	1-5056 and 5058-8376
5058	1-5057 and 5059-8376
5059	1-5058 and 5060-8376
5060	1-5059 and 5061-8376
5061	1-5060 and 5062-8376
5062	1-5061 and 5063-8376
5063	1-5062 and 5064-8376
5064	1-5063 and 5065-8376
5065	1-5064 and 5066-8376
5066	1-5065 and 5067-8376
5067	1-5066 and 5068-8376
5068	1-5067 and 5069-8376
5069	1-5068 and 5070-8376
5070	1-5069 and 5071-8376
5071	1-5070 and 5072-8376
5072	1-5071 and 5073-8376
5073	1-5072 and 5074-8376
5074	1-5073 and 5075-8376
5075	1-5074 and 5076-8376
5076	1-5075 and 5077-8376
5077	1-5076 and 5078-8376
5078	1-5077 and 5079-8376
5079	1-5078 and 5080-8376
5080	1-5079 and 5081-8376
5081	1-5080 and 5082-8376
5082	1-5081 and 5083-8376
5083	1-5082 and 5084-8376
5084	1-5083 and 5085-8376
5085	1-5084 and 5086-8376
5086	1-5085 and 5087-8376
5087	1-5086 and 5088-8376

5088	1-5087 and 5089-8376
5089	1-5088 and 5090-8376
5090	1-5089 and 5091-8376
5091	1-5090 and 5092-8376
5092	1-5091 and 5093-8376
5093	1-5092 and 5094-8376
5094	1-5093 and 5095-8376
5095	1-5094 and 5096-8376
5096	1-5095 and 5097-8376
5097	1-5096 and 5098-8376
5098	1-5097 and 5099-8376
5099	1-5098 and 5100-8376
5100	1-5099 and 5101-8376
5101	1-5100 and 5102-8376
5102	1-5101 and 5103-8376
5103	1-5102 and 5104-8376
5104	1-5103 and 5105-8376
5105	1-5104 and 5106-8376
5106	1-5105 and 5107-8376
5107	1-5106 and 5108-8376
5108	1-5107 and 5109-8376
5109	1-5108 and 5110-8376
5110	1-5109 and 5111-8376
5111	1-5110 and 5112-8376
5112	1-5111 and 5113-8376
5113	1-5112 and 5114-8376
5114	1-5113 and 5115-8376
5115	1-5114 and 5116-8376
5116	1-5115 and 5117-8376
5117	1-5116 and 5118-8376
5118	1-5117 and 5119-8376
5119	1-5118 and 5120-8376
5120	1-5119 and 5121-8376
5121	1-5120 and 5122-8376
5122	1-5121 and 5123-8376
5123	1-5122 and 5124-8376
5124	1-5123 and 5125-8376
5125	1-5124 and 5126-8376
5126	1-5125 and 5127-8376
5127	1-5126 and 5128-8376
5128	1-5127 and 5129-8376
5129	1-5128 and 5130-8376
5130	1-5129 and 5131-8376
5131	1-5130 and 5132-8376
5132	1-5131 and 5133-8376
5133	1-5132 and 5134-8376
5134	1-5133 and 5135-8376
5135	1-5134 and 5136-8376
5136	1-5135 and 5137-8376
5137	1-5136 and 5138-8376
5138	1-5137 and 5139-8376
5139	1-5138 and 5140-8376
5140	1-5139 and 5141-8376
5141	1-5140 and 5142-8376
5142	1-5141 and 5143-8376
5143	1-5142 and 5144-8376
5144	1-5143 and 5145-8376

5145	1-5144 and 5146-8376
5146	1-5145 and 5147-8376
5147	1-5146 and 5148-8376
5148	1-5147 and 5149-8376
5149	1-5148 and 5150-8376
5150	1-5149 and 5151-8376
5151	1-5150 and 5152-8376
5152	1-5151 and 5153-8376
5153	1-5152 and 5154-8376
5154	1-5153 and 5155-8376
5155	1-5154 and 5156-8376
5156	1-5155 and 5157-8376
5157	1-5156 and 5158-8376
5158	1-5157 and 5159-8376
5159	1-5158 and 5160-8376
5160	1-5159 and 5161-8376
5161	1-5160 and 5162-8376
5162	1-5161 and 5163-8376
5163	1-5162 and 5164-8376
5164	1-5163 and 5165-8376
5165	1-5164 and 5166-8376
5166	1-5165 and 5167-8376
5167	1-5166 and 5168-8376
5168	1-5167 and 5169-8376
5169	1-5168 and 5170-8376
5170	1-5169 and 5171-8376
5171	1-5170 and 5172-8376
5172	1-5171 and 5173-8376
5173	1-5172 and 5174-8376
5174	1-5173 and 5175-8376
5175	1-5174 and 5176-8376
5176	1-5175 and 5177-8376
5177	1-5176 and 5178-8376
5178	1-5177 and 5179-8376
5179	1-5178 and 5180-8376
5180	1-5179 and 5181-8376
5181	1-5180 and 5182-8376
5182	1-5181 and 5183-8376
5183	1-5182 and 5184-8376
5184	1-5183 and 5185-8376
5185	1-5184 and 5186-8376
5186	1-5185 and 5187-8376
5187	1-5186 and 5188-8376
5188	1-5187 and 5189-8376
5189	1-5188 and 5190-8376
5190	1-5189 and 5191-8376
5191	1-5190 and 5192-8376
5192	1-5191 and 5193-8376
5193	1-5192 and 5194-8376
5194	1-5193 and 5195-8376
5195	1-5194 and 5196-8376
5196	1-5195 and 5197-8376
5197	1-5196 and 5198-8376
5198	1-5197 and 5199-8376
5199	1-5198 and 5200-8376
5200	1-5199 and 5201-8376
5201	1-5200 and 5202-8376

5202	1-5201 and 5203-8376
5203	1-5202 and 5204-8376
5204	1-5203 and 5205-8376
5205	1-5204 and 5206-8376
5206	1-5205 and 5207-8376
5207	1-5206 and 5208-8376
5208	1-5207 and 5209-8376
5209	1-5208 and 5210-8376
5210	1-5209 and 5211-8376
5211	1-5210 and 5212-8376
5212	1-5211 and 5213-8376
5213	1-5212 and 5214-8376
5214	1-5213 and 5215-8376
5215	1-5214 and 5216-8376
5216	1-5215 and 5217-8376
5217	1-5216 and 5218-8376
5218	1-5217 and 5219-8376
5219	1-5218 and 5220-8376
5220	1-5219 and 5221-8376
5221	1-5220 and 5222-8376
5222	1-5221 and 5223-8376
5223	1-5222 and 5224-8376
5224	1-5223 and 5225-8376
5225	1-5224 and 5226-8376
5226	1-5225 and 5227-8376
5227	1-5226 and 5228-8376
5228	1-5227 and 5229-8376
5229	1-5228 and 5230-8376
5230	1-5229 and 5231-8376
5231	1-5230 and 5232-8376
5232	1-5231 and 5233-8376
5233	1-5232 and 5234-8376
5234	1-5233 and 5235-8376
5235	1-5234 and 5236-8376
5236	1-5235 and 5237-8376
5237	1-5236 and 5238-8376
5238	1-5237 and 5239-8376
5239	1-5238 and 5240-8376
5240	1-5239 and 5241-8376
5241	1-5240 and 5242-8376
5242	1-5241 and 5243-8376
5243	1-5242 and 5244-8376
5244	1-5243 and 5245-8376
5245	1-5244 and 5246-8376
5246	1-5245 and 5247-8376
5247	1-5246 and 5248-8376
5248	1-5247 and 5249-8376
5249	1-5248 and 5250-8376
5250	1-5249 and 5251-8376
5251	1-5250 and 5252-8376
5252	1-5251 and 5253-8376
5253	1-5252 and 5254-8376
5254	1-5253 and 5255-8376
5255	1-5254 and 5256-8376
5256	1-5255 and 5257-8376
5257	1-5256 and 5258-8376
5258	1-5257 and 5259-8376

5259	1-5258 and 5260-8376
5260	1-5259 and 5261-8376
5261	1-5260 and 5262-8376
5262	1-5261 and 5263-8376
5263	1-5262 and 5264-8376
5264	1-5263 and 5265-8376
5265	1-5264 and 5266-8376
5266	1-5265 and 5267-8376
5267	1-5266 and 5268-8376
5268	1-5267 and 5269-8376
5269	1-5268 and 5270-8376
5270	1-5269 and 5271-8376
5271	1-5270 and 5272-8376
5272	1-5271 and 5273-8376
5273	1-5272 and 5274-8376
5274	1-5273 and 5275-8376
5275	1-5274 and 5276-8376
5276	1-5275 and 5277-8376
5277	1-5276 and 5278-8376
5278	1-5277 and 5279-8376
5279	1-5278 and 5280-8376
5280	1-5279 and 5281-8376
5281	1-5280 and 5282-8376
5282	1-5281 and 5283-8376
5283	1-5282 and 5284-8376
5284	1-5283 and 5285-8376
5285	1-5284 and 5286-8376
5286	1-5285 and 5287-8376
5287	1-5286 and 5288-8376
5288	1-5287 and 5289-8376
5289	1-5288 and 5290-8376
5290	1-5289 and 5291-8376
5291	1-5290 and 5292-8376
5292	1-5291 and 5293-8376
5293	1-5292 and 5294-8376
5294	1-5293 and 5295-8376
5295	1-5294 and 5296-8376
5296	1-5295 and 5297-8376
5297	1-5296 and 5298-8376
5298	1-5297 and 5299-8376
5299	1-5298 and 5300-8376
5300	1-5299 and 5301-8376
5301	1-5300 and 5302-8376
5302	1-5301 and 5303-8376
5303	1-5302 and 5304-8376
5304	1-5303 and 5305-8376
5305	1-5304 and 5306-8376
5306	1-5305 and 5307-8376
5307	1-5306 and 5308-8376
5308	1-5307 and 5309-8376
5309	1-5308 and 5310-8376
5310	1-5309 and 5311-8376
5311	1-5310 and 5312-8376
5312	1-5311 and 5313-8376
5313	1-5312 and 5314-8376
5314	1-5313 and 5315-8376
5315	1-5314 and 5316-8376

5316	1-5315 and 5317-8376
5317	1-5316 and 5318-8376
5318	1-5317 and 5319-8376
5319	1-5318 and 5320-8376
5320	1-5319 and 5321-8376
5321	1-5320 and 5322-8376
5322	1-5321 and 5323-8376
5323	1-5322 and 5324-8376
5324	1-5323 and 5325-8376
5325	1-5324 and 5326-8376
5326	1-5325 and 5327-8376
5327	1-5326 and 5328-8376
5328	1-5327 and 5329-8376
5329	1-5328 and 5330-8376
5330	1-5329 and 5331-8376
5331	1-5330 and 5332-8376
5332	1-5331 and 5333-8376
5333	1-5332 and 5334-8376
5334	1-5333 and 5335-8376
5335	1-5334 and 5336-8376
5336	1-5335 and 5337-8376
5337	1-5336 and 5338-8376
5338	1-5337 and 5339-8376
5339	1-5338 and 5340-8376
5340	1-5339 and 5341-8376
5341	1-5340 and 5342-8376
5342	1-5341 and 5343-8376
5343	1-5342 and 5344-8376
5344	1-5343 and 5345-8376
5345	1-5344 and 5346-8376
5346	1-5345 and 5347-8376
5347	1-5346 and 5348-8376
5348	1-5347 and 5349-8376
5349	1-5348 and 5350-8376
5350	1-5349 and 5351-8376
5351	1-5350 and 5352-8376
5352	1-5351 and 5353-8376
5353	1-5352 and 5354-8376
5354	1-5353 and 5355-8376
5355	1-5354 and 5356-8376
5356	1-5355 and 5357-8376
5357	1-5356 and 5358-8376
5358	1-5357 and 5359-8376
5359	1-5358 and 5360-8376
5360	1-5359 and 5361-8376
5361	1-5360 and 5362-8376
5362	1-5361 and 5363-8376
5363	1-5362 and 5364-8376
5364	1-5363 and 5365-8376
5365	1-5364 and 5366-8376
5366	1-5365 and 5367-8376
5367	1-5366 and 5368-8376
5368	1-5367 and 5369-8376
5369	1-5368 and 5370-8376
5370	1-5369 and 5371-8376
5371	1-5370 and 5372-8376
5372	1-5371 and 5373-8376

5373	1-5372 and 5374-8376
5374	1-5373 and 5375-8376
5375	1-5374 and 5376-8376
5376	1-5375 and 5377-8376
5377	1-5376 and 5378-8376
5378	1-5377 and 5379-8376
5379	1-5378 and 5380-8376
5380	1-5379 and 5381-8376
5381	1-5380 and 5382-8376
5382	1-5381 and 5383-8376
5383	1-5382 and 5384-8376
5384	1-5383 and 5385-8376
5385	1-5384 and 5386-8376
5386	1-5385 and 5387-8376
5387	1-5386 and 5388-8376
5388	1-5387 and 5389-8376
5389	1-5388 and 5390-8376
5390	1-5389 and 5391-8376
5391	1-5390 and 5392-8376
5392	1-5391 and 5393-8376
5393	1-5392 and 5394-8376
5394	1-5393 and 5395-8376
5395	1-5394 and 5396-8376
5396	1-5395 and 5397-8376
5397	1-5396 and 5398-8376
5398	1-5397 and 5399-8376
5399	1-5398 and 5400-8376
5400	1-5399 and 5401-8376
5401	1-5400 and 5402-8376
5402	1-5401 and 5403-8376
5403	1-5402 and 5404-8376
5404	1-5403 and 5405-8376
5405	1-5404 and 5406-8376
5406	1-5405 and 5407-8376
5407	1-5406 and 5408-8376
5408	1-5407 and 5409-8376
5409	1-5408 and 5410-8376
5410	1-5409 and 5411-8376
5411	1-5410 and 5412-8376
5412	1-5411 and 5413-8376
5413	1-5412 and 5414-8376
5414	1-5413 and 5415-8376
5415	1-5414 and 5416-8376
5416	1-5415 and 5417-8376
5417	1-5416 and 5418-8376
5418	1-5417 and 5419-8376
5419	1-5418 and 5420-8376
5420	1-5419 and 5421-8376
5421	1-5420 and 5422-8376
5422	1-5421 and 5423-8376
5423	1-5422 and 5424-8376
5424	1-5423 and 5425-8376
5425	1-5424 and 5426-8376
5426	1-5425 and 5427-8376
5427	1-5426 and 5428-8376
5428	1-5427 and 5429-8376
5429	1-5428 and 5430-8376

5430	1-5429 and 5431-8376
5431	1-5430 and 5432-8376
5432	1-5431 and 5433-8376
5433	1-5432 and 5434-8376
5434	1-5433 and 5435-8376
5435	1-5434 and 5436-8376
5436	1-5435 and 5437-8376
5437	1-5436 and 5438-8376
5438	1-5437 and 5439-8376
5439	1-5438 and 5440-8376
5440	1-5439 and 5441-8376
5441	1-5440 and 5442-8376
5442	1-5441 and 5443-8376
5443	1-5442 and 5444-8376
5444	1-5443 and 5445-8376
5445	1-5444 and 5446-8376
5446	1-5445 and 5447-8376
5447	1-5446 and 5448-8376
5448	1-5447 and 5449-8376
5449	1-5448 and 5450-8376
5450	1-5449 and 5451-8376
5451	1-5450 and 5452-8376
5452	1-5451 and 5453-8376
5453	1-5452 and 5454-8376
5454	1-5453 and 5455-8376
5455	1-5454 and 5456-8376
5456	1-5455 and 5457-8376
5457	1-5456 and 5458-8376
5458	1-5457 and 5459-8376
5459	1-5458 and 5460-8376
5460	1-5459 and 5461-8376
5461	1-5460 and 5462-8376
5462	1-5461 and 5463-8376
5463	1-5462 and 5464-8376
5464	1-5463 and 5465-8376
5465	1-5464 and 5466-8376
5466	1-5465 and 5467-8376
5467	1-5466 and 5468-8376
5468	1-5467 and 5469-8376
5469	1-5468 and 5470-8376
5470	1-5469 and 5471-8376
5471	1-5470 and 5472-8376
5472	1-5471 and 5473-8376
5473	1-5472 and 5474-8376
5474	1-5473 and 5475-8376
5475	1-5474 and 5476-8376
5476	1-5475 and 5477-8376
5477	1-5476 and 5478-8376
5478	1-5477 and 5479-8376
5479	1-5478 and 5480-8376
5480	1-5479 and 5481-8376
5481	1-5480 and 5482-8376
5482	1-5481 and 5483-8376
5483	1-5482 and 5484-8376
5484	1-5483 and 5485-8376
5485	1-5484 and 5486-8376
5486	1-5485 and 5487-8376

5487	1-5486 and 5488-8376
5488	1-5487 and 5489-8376
5489	1-5488 and 5490-8376
5490	1-5489 and 5491-8376
5491	1-5490 and 5492-8376
5492	1-5491 and 5493-8376
5493	1-5492 and 5494-8376
5494	1-5493 and 5495-8376
5495	1-5494 and 5496-8376
5496	1-5495 and 5497-8376
5497	1-5496 and 5498-8376
5498	1-5497 and 5499-8376
5499	1-5498 and 5500-8376
5500	1-5499 and 5501-8376
5501	1-5500 and 5502-8376
5502	1-5501 and 5503-8376
5503	1-5502 and 5504-8376
5504	1-5503 and 5505-8376
5505	1-5504 and 5506-8376
5506	1-5505 and 5507-8376
5507	1-5506 and 5508-8376
5508	1-5507 and 5509-8376
5509	1-5508 and 5510-8376
5510	1-5509 and 5511-8376
5511	1-5510 and 5512-8376
5512	1-5511 and 5513-8376
5513	1-5512 and 5514-8376
5514	1-5513 and 5515-8376
5515	1-5514 and 5516-8376
5516	1-5515 and 5517-8376
5517	1-5516 and 5518-8376
5518	1-5517 and 5519-8376
5519	1-5518 and 5520-8376
5520	1-5519 and 5521-8376
5521	1-5520 and 5522-8376
5522	1-5521 and 5523-8376
5523	1-5522 and 5524-8376
5524	1-5523 and 5525-8376
5525	1-5524 and 5526-8376
5526	1-5525 and 5527-8376
5527	1-5526 and 5528-8376
5528	1-5527 and 5529-8376
5529	1-5528 and 5530-8376
5530	1-5529 and 5531-8376
5531	1-5530 and 5532-8376
5532	1-5531 and 5533-8376
5533	1-5532 and 5534-8376
5534	1-5533 and 5535-8376
5535	1-5534 and 5536-8376
5536	1-5535 and 5537-8376
5537	1-5536 and 5538-8376
5538	1-5537 and 5539-8376
5539	1-5538 and 5540-8376
5540	1-5539 and 5541-8376
5541	1-5540 and 5542-8376
5542	1-5541 and 5543-8376
5543	1-5542 and 5544-8376

5544	1-5543 and 5545-8376	5601	1-5600 and 5602-8376	5658	1-5657 and 5659-8376
5545	1-5544 and 5546-8376	5602	1-5601 and 5603-8376	5659	1-5658 and 5660-8376
5546	1-5545 and 5547-8376	5603	1-5602 and 5604-8376	5660	1-5659 and 5661-8376
5547	1-5546 and 5548-8376	5604	1-5603 and 5605-8376	5661	1-5660 and 5662-8376
5548	1-5547 and 5549-8376	5605	1-5604 and 5606-8376	5662	1-5661 and 5663-8376
5549	1-5548 and 5550-8376	5606	1-5605 and 5607-8376	5663	1-5662 and 5664-8376
5550	1-5549 and 5551-8376	5607	1-5606 and 5608-8376	5664	1-5663 and 5665-8376
5551	1-5550 and 5552-8376	5608	1-5607 and 5609-8376	5665	1-5664 and 5666-8376
5552	1-5551 and 5553-8376	5609	1-5608 and 5610-8376	5666	1-5665 and 5667-8376
5553	1-5552 and 5554-8376	5610	1-5609 and 5611-8376	5667	1-5666 and 5668-8376
5554	1-5553 and 5555-8376	5611	1-5610 and 5612-8376	5668	1-5667 and 5669-8376
5555	1-5554 and 5556-8376	5612	1-5611 and 5613-8376	5669	1-5668 and 5670-8376
5556	1-5555 and 5557-8376	5613	1-5612 and 5614-8376	5670	1-5669 and 5671-8376
5557	1-5556 and 5558-8376	5614	1-5613 and 5615-8376	5671	1-5670 and 5672-8376
5558	1-5557 and 5559-8376	5615	1-5614 and 5616-8376	5672	1-5671 and 5673-8376
5559	1-5558 and 5560-8376	5616	1-5615 and 5617-8376	5673	1-5672 and 5674-8376
5560	1-5559 and 5561-8376	5617	1-5616 and 5618-8376	5674	1-5673 and 5675-8376
5561	1-5560 and 5562-8376	5618	1-5617 and 5619-8376	5675	1-5674 and 5676-8376
5562	1-5561 and 5563-8376	5619	1-5618 and 5620-8376	5676	1-5675 and 5677-8376
5563	1-5562 and 5564-8376	5620	1-5619 and 5621-8376	5677	1-5676 and 5678-8376
5564	1-5563 and 5565-8376	5621	1-5620 and 5622-8376	5678	1-5677 and 5679-8376
5565	1-5564 and 5566-8376	5622	1-5621 and 5623-8376	5679	1-5678 and 5680-8376
5566	1-5565 and 5567-8376	5623	1-5622 and 5624-8376	5680	1-5679 and 5681-8376
5567	1-5566 and 5568-8376	5624	1-5623 and 5625-8376	5681	1-5680 and 5682-8376
5568	1-5567 and 5569-8376	5625	1-5624 and 5626-8376	5682	1-5681 and 5683-8376
5569	1-5568 and 5570-8376	5626	1-5625 and 5627-8376	5683	1-5682 and 5684-8376
5570	1-5569 and 5571-8376	5627	1-5626 and 5628-8376	5684	1-5683 and 5685-8376
5571	1-5570 and 5572-8376	5628	1-5627 and 5629-8376	5685	1-5684 and 5686-8376
5572	1-5571 and 5573-8376	5629	1-5628 and 5630-8376	5686	1-5685 and 5687-8376
5573	1-5572 and 5574-8376	5630	1-5629 and 5631-8376	5687	1-5686 and 5688-8376
5574	1-5573 and 5575-8376	5631	1-5630 and 5632-8376	5688	1-5687 and 5689-8376
5575	1-5574 and 5576-8376	5632	1-5631 and 5633-8376	5689	1-5688 and 5690-8376
5576	1-5575 and 5577-8376	5633	1-5632 and 5634-8376	5690	1-5689 and 5691-8376
5577	1-5576 and 5578-8376	5634	1-5633 and 5635-8376	5691	1-5690 and 5692-8376
5578	1-5577 and 5579-8376	5635	1-5634 and 5636-8376	5692	1-5691 and 5693-8376
5579	1-5578 and 5580-8376	5636	1-5635 and 5637-8376	5693	1-5692 and 5694-8376
5580	1-5579 and 5581-8376	5637	1-5636 and 5638-8376	5694	1-5693 and 5695-8376
5581	1-5580 and 5582-8376	5638	1-5637 and 5639-8376	5695	1-5694 and 5696-8376
5582	1-5581 and 5583-8376	5639	1-5638 and 5640-8376	5696	1-5695 and 5697-8376
5583	1-5582 and 5584-8376	5640	1-5639 and 5641-8376	5697	1-5696 and 5698-8376
5584	1-5583 and 5585-8376	5641	1-5640 and 5642-8376	5698	1-5697 and 5699-8376
5585	1-5584 and 5586-8376	5642	1-5641 and 5643-8376	5699	1-5698 and 5700-8376
5586	1-5585 and 5587-8376	5643	1-5642 and 5644-8376	5700	1-5699 and 5701-8376
5587	1-5586 and 5588-8376	5644	1-5643 and 5645-8376	5701	1-5700 and 5702-8376
5588	1-5587 and 5589-8376	5645	1-5644 and 5646-8376	5702	1-5701 and 5703-8376
5589	1-5588 and 5590-8376	5646	1-5645 and 5647-8376	5703	1-5702 and 5704-8376
5590	1-5589 and 5591-8376	5647	1-5646 and 5648-8376	5704	1-5703 and 5705-8376
5591	1-5590 and 5592-8376	5648	1-5647 and 5649-8376	5705	1-5704 and 5706-8376
5592	1-5591 and 5593-8376	5649	1-5648 and 5650-8376	5706	1-5705 and 5707-8376
5593	1-5592 and 5594-8376	5650	1-5649 and 5651-8376	5707	1-5706 and 5708-8376
5594	1-5593 and 5595-8376	5651	1-5650 and 5652-8376	5708	1-5707 and 5709-8376
5595	1-5594 and 5596-8376	5652	1-5651 and 5653-8376	5709	1-5708 and 5710-8376
5596	1-5595 and 5597-8376	5653	1-5652 and 5654-8376	5710	1-5709 and 5711-8376
5597	1-5596 and 5598-8376	5654	1-5653 and 5655-8376	5711	1-5710 and 5712-8376
5598	1-5597 and 5599-8376	5655	1-5654 and 5656-8376	5712	1-5711 and 5713-8376
5599	1-5598 and 5600-8376	5656	1-5655 and 5657-8376	5713	1-5712 and 5714-8376
5600	1-5599 and 5601-8376	5657	1-5656 and 5658-8376	5714	1-5713 and 5715-8376



5715	1-5714 and 5716-8376
5716	1-5715 and 5717-8376
5717	1-5716 and 5718-8376
5718	1-5717 and 5719-8376
5719	1-5718 and 5720-8376
5720	1-5719 and 5721-8376
5721	1-5720 and 5722-8376
5722	1-5721 and 5723-8376
5723	1-5722 and 5724-8376
5724	1-5723 and 5725-8376
5725	1-5724 and 5726-8376
5726	1-5725 and 5727-8376
5727	1-5726 and 5728-8376
5728	1-5727 and 5729-8376
5729	1-5728 and 5730-8376
5730	1-5729 and 5731-8376
5731	1-5730 and 5732-8376
5732	1-5731 and 5733-8376
5733	1-5732 and 5734-8376
5734	1-5733 and 5735-8376
5735	1-5734 and 5736-8376
5736	1-5735 and 5737-8376
5737	1-5736 and 5738-8376
5738	1-5737 and 5739-8376
5739	1-5738 and 5740-8376
5740	1-5739 and 5741-8376
5741	1-5740 and 5742-8376
5742	1-5741 and 5743-8376
5743	1-5742 and 5744-8376
5744	1-5743 and 5745-8376
5745	1-5744 and 5746-8376
5746	1-5745 and 5747-8376
5747	1-5746 and 5748-8376
5748	1-5747 and 5749-8376
5749	1-5748 and 5750-8376
5750	1-5749 and 5751-8376
5751	1-5750 and 5752-8376
5752	1-5751 and 5753-8376
5753	1-5752 and 5754-8376
5754	1-5753 and 5755-8376
5755	1-5754 and 5756-8376
5756	1-5755 and 5757-8376
5757	1-5756 and 5758-8376
5758	1-5757 and 5759-8376
5759	1-5758 and 5760-8376
5760	1-5759 and 5761-8376
5761	1-5760 and 5762-8376
5762	1-5761 and 5763-8376
5763	1-5762 and 5764-8376
5764	1-5763 and 5765-8376
5765	1-5764 and 5766-8376
5766	1-5765 and 5767-8376
5767	1-5766 and 5768-8376
5768	1-5767 and 5769-8376
5769	1-5768 and 5770-8376
5770	1-5769 and 5771-8376
5771	1-5770 and 5772-8376

5772	1-5771 and 5773-8376
5773	1-5772 and 5774-8376
5774	1-5773 and 5775-8376
5775	1-5774 and 5776-8376
5776	1-5775 and 5777-8376
5777	1-5776 and 5778-8376
5778	1-5777 and 5779-8376
5779	1-5778 and 5780-8376
5780	1-5779 and 5781-8376
5781	1-5780 and 5782-8376
5782	1-5781 and 5783-8376
5783	1-5782 and 5784-8376
5784	1-5783 and 5785-8376
5785	1-5784 and 5786-8376
5786	1-5785 and 5787-8376
5787	1-5786 and 5788-8376
5788	1-5787 and 5789-8376
5789	1-5788 and 5790-8376
5790	1-5789 and 5791-8376
5791	1-5790 and 5792-8376
5792	1-5791 and 5793-8376
5793	1-5792 and 5794-8376
5794	1-5793 and 5795-8376
5795	1-5794 and 5796-8376
5796	1-5795 and 5797-8376
5797	1-5796 and 5798-8376
5798	1-5797 and 5799-8376
5799	1-5798 and 5800-8376
5800	1-5799 and 5801-8376
5801	1-5800 and 5802-8376
5802	1-5801 and 5803-8376
5803	1-5802 and 5804-8376
5804	1-5803 and 5805-8376
5805	1-5804 and 5806-8376
5806	1-5805 and 5807-8376
5807	1-5806 and 5808-8376
5808	1-5807 and 5809-8376
5809	1-5808 and 5810-8376
5810	1-5809 and 5811-8376
5811	1-5810 and 5812-8376
5812	1-5811 and 5813-8376
5813	1-5812 and 5814-8376
5814	1-5813 and 5815-8376
5815	1-5814 and 5816-8376
5816	1-5815 and 5817-8376
5817	1-5816 and 5818-8376
5818	1-5817 and 5819-8376
5819	1-5818 and 5820-8376
5820	1-5819 and 5821-8376
5821	1-5820 and 5822-8376
5822	1-5821 and 5823-8376
5823	1-5822 and 5824-8376
5824	1-5823 and 5825-8376
5825	1-5824 and 5826-8376
5826	1-5825 and 5827-8376
5827	1-5826 and 5828-8376
5828	1-5827 and 5829-8376

5829	1-5828 and 5830-8376
5830	1-5829 and 5831-8376
5831	1-5830 and 5832-8376
5832	1-5831 and 5833-8376
5833	1-5832 and 5834-8376
5834	1-5833 and 5835-8376
5835	1-5834 and 5836-8376
5836	1-5835 and 5837-8376
5837	1-5836 and 5838-8376
5838	1-5837 and 5839-8376
5839	1-5838 and 5840-8376
5840	1-5839 and 5841-8376
5841	1-5840 and 5842-8376
5842	1-5841 and 5843-8376
5843	1-5842 and 5844-8376
5844	1-5843 and 5845-8376
5845	1-5844 and 5846-8376
5846	1-5845 and 5847-8376
5847	1-5846 and 5848-8376
5848	1-5847 and 5849-8376
5849	1-5848 and 5850-8376
5850	1-5849 and 5851-8376
5851	1-5850 and 5852-8376
5852	1-5851 and 5853-8376
5853	1-5852 and 5854-8376
5854	1-5853 and 5855-8376
5855	1-5854 and 5856-8376
5856	1-5855 and 5857-8376
5857	1-5856 and 5858-8376
5858	1-5857 and 5859-8376
5859	1-5858 and 5860-8376
5860	1-5859 and 5861-8376
5861	1-5860 and 5862-8376
5862	1-5861 and 5863-8376
5863	1-5862 and 5864-8376
5864	1-5863 and 5865-8376
5865	1-5864 and 5866-8376
5866	1-5865 and 5867-8376
5867	1-5866 and 5868-8376
5868	1-5867 and 5869-8376
5869	1-5868 and 5870-8376
5870	1-5869 and 5871-8376
5871	1-5870 and 5872-8376
5872	1-5871 and 5873-8376
5873	1-5872 and 5874-8376
5874	1-5873 and 5875-8376
5875	1-5874 and 5876-8376
5876	1-5875 and 5877-8376
5877	1-5876 and 5878-8376
5878	1-5877 and 5879-8376
5879	1-5878 and 5880-8376
5880	1-5879 and 5881-8376
5881	1-5880 and 5882-8376
5882	1-5881 and 5883-8376
5883	1-5882 and 5884-8376
5884	1-5883 and 5885-8376
5885	1-5884 and 5886-8376



5886	1-5885 and 5887-8376
5887	1-5886 and 5888-8376
5888	1-5887 and 5889-8376
5889	1-5888 and 5890-8376
5890	1-5889 and 5891-8376
5891	1-5890 and 5892-8376
5892	1-5891 and 5893-8376
5893	1-5892 and 5894-8376
5894	1-5893 and 5895-8376
5895	1-5894 and 5896-8376
5896	1-5895 and 5897-8376
5897	1-5896 and 5898-8376
5898	1-5897 and 5899-8376
5899	1-5898 and 5900-8376
5900	1-5899 and 5901-8376
5901	1-5900 and 5902-8376
5902	1-5901 and 5903-8376
5903	1-5902 and 5904-8376
5904	1-5903 and 5905-8376
5905	1-5904 and 5906-8376
5906	1-5905 and 5907-8376
5907	1-5906 and 5908-8376
5908	1-5907 and 5909-8376
5909	1-5908 and 5910-8376
5910	1-5909 and 5911-8376
5911	1-5910 and 5912-8376
5912	1-5911 and 5913-8376
5913	1-5912 and 5914-8376
5914	1-5913 and 5915-8376
5915	1-5914 and 5916-8376
5916	1-5915 and 5917-8376
5917	1-5916 and 5918-8376
5918	1-5917 and 5919-8376
5919	1-5918 and 5920-8376
5920	1-5919 and 5921-8376
5921	1-5920 and 5922-8376
5922	1-5921 and 5923-8376
5923	1-5922 and 5924-8376
5924	1-5923 and 5925-8376
5925	1-5924 and 5926-8376
5926	1-5925 and 5927-8376
5927	1-5926 and 5928-8376
5928	1-5927 and 5929-8376
5929	1-5928 and 5930-8376
5930	1-5929 and 5931-8376
5931	1-5930 and 5932-8376
5932	1-5931 and 5933-8376
5933	1-5932 and 5934-8376
5934	1-5933 and 5935-8376
5935	1-5934 and 5936-8376
5936	1-5935 and 5937-8376
5937	1-5936 and 5938-8376
5938	1-5937 and 5939-8376
5939	1-5938 and 5940-8376
5940	1-5939 and 5941-8376
5941	1-5940 and 5942-8376
5942	1-5941 and 5943-8376

5943	1-5942 and 5944-8376
5944	1-5943 and 5945-8376
5945	1-5944 and 5946-8376
5946	1-5945 and 5947-8376
5947	1-5946 and 5948-8376
5948	1-5947 and 5949-8376
5949	1-5948 and 5950-8376
5950	1-5949 and 5951-8376
5951	1-5950 and 5952-8376
5952	1-5951 and 5953-8376
5953	1-5952 and 5954-8376
5954	1-5953 and 5955-8376
5955	1-5954 and 5956-8376
5956	1-5955 and 5957-8376
5957	1-5956 and 5958-8376
5958	1-5957 and 5959-8376
5959	1-5958 and 5960-8376
5960	1-5959 and 5961-8376
5961	1-5960 and 5962-8376
5962	1-5961 and 5963-8376
5963	1-5962 and 5964-8376
5964	1-5963 and 5965-8376
5965	1-5964 and 5966-8376
5966	1-5965 and 5967-8376
5967	1-5966 and 5968-8376
5968	1-5967 and 5969-8376
5969	1-5968 and 5970-8376
5970	1-5969 and 5971-8376
5971	1-5970 and 5972-8376
5972	1-5971 and 5973-8376
5973	1-5972 and 5974-8376
5974	1-5973 and 5975-8376
5975	1-5974 and 5976-8376
5976	1-5975 and 5977-8376
5977	1-5976 and 5978-8376
5978	1-5977 and 5979-8376
5979	1-5978 and 5980-8376
5980	1-5979 and 5981-8376
5981	1-5980 and 5982-8376
5982	1-5981 and 5983-8376
5983	1-5982 and 5984-8376
5984	1-5983 and 5985-8376
5985	1-5984 and 5986-8376
5986	1-5985 and 5987-8376
5987	1-5986 and 5988-8376
5988	1-5987 and 5989-8376
5989	1-5988 and 5990-8376
5990	1-5989 and 5991-8376
5991	1-5990 and 5992-8376
5992	1-5991 and 5993-8376
5993	1-5992 and 5994-8376
5994	1-5993 and 5995-8376
5995	1-5994 and 5996-8376
5996	1-5995 and 5997-8376
5997	1-5996 and 5998-8376
5998	1-5997 and 5999-8376
5999	1-5998 and 6000-8376

6000	1-5999 and 6001-8376
6001	1-6000 and 6002-8376
6002	1-6001 and 6003-8376
6003	1-6002 and 6004-8376
6004	1-6003 and 6005-8376
6005	1-6004 and 6006-8376
6006	1-6005 and 6007-8376
6007	1-6006 and 6008-8376
6008	1-6007 and 6009-8376
6009	1-6008 and 6010-8376
6010	1-6009 and 6011-8376
6011	1-6010 and 6012-8376
6012	1-6011 and 6013-8376
6013	1-6012 and 6014-8376
6014	1-6013 and 6015-8376
6015	1-6014 and 6016-8376
6016	1-6015 and 6017-8376
6017	1-6016 and 6018-8376
6018	1-6017 and 6019-8376
6019	1-6018 and 6020-8376
6020	1-6019 and 6021-8376
6021	1-6020 and 6022-8376
6022	1-6021 and 6023-8376
6023	1-6022 and 6024-8376
6024	1-6023 and 6025-8376
6025	1-6024 and 6026-8376
6026	1-6025 and 6027-8376
6027	1-6026 and 6028-8376
6028	1-6027 and 6029-8376
6029	1-6028 and 6030-8376
6030	1-6029 and 6031-8376
6031	1-6030 and 6032-8376
6032	1-6031 and 6033-8376
6033	1-6032 and 6034-8376
6034	1-6033 and 6035-8376
6035	1-6034 and 6036-8376
6036	1-6035 and 6037-8376
6037	1-6036 and 6038-8376
6038	1-6037 and 6039-8376
6039	1-6038 and 6040-8376
6040	1-6039 and 6041-8376
6041	1-6040 and 6042-8376
6042	1-6041 and 6043-8376
6043	1-6042 and 6044-8376
6044	1-6043 and 6045-8376
6045	1-6044 and 6046-8376
6046	1-6045 and 6047-8376
6047	1-6046 and 6048-8376
6048	1-6047 and 6049-8376
6049	1-6048 and 6050-8376
6050	1-6049 and 6051-8376
6051	1-6050 and 6052-8376
6052	1-6051 and 6053-8376
6053	1-6052 and 6054-8376
6054	1-6053 and 6055-8376
6055	1-6054 and 6056-8376
6056	1-6055 and 6057-8376

6057	1-6056 and 6058-8376	6114	1-6113 and 6115-8376	6171	1-6170 and 6172-8376
6058	1-6057 and 6059-8376	6115	1-6114 and 6116-8376	6172	1-6171 and 6173-8376
6059	1-6058 and 6060-8376	6116	1-6115 and 6117-8376	6173	1-6172 and 6174-8376
6060	1-6059 and 6061-8376	6117	1-6116 and 6118-8376	6174	1-6173 and 6175-8376
6061	1-6060 and 6062-8376	6118	1-6117 and 6119-8376	6175	1-6174 and 6176-8376
6062	1-6061 and 6063-8376	6119	1-6118 and 6120-8376	6176	1-6175 and 6177-8376
6063	1-6062 and 6064-8376	6120	1-6119 and 6121-8376	6177	1-6176 and 6178-8376
6064	1-6063 and 6065-8376	6121	1-6120 and 6122-8376	6178	1-6177 and 6179-8376
6065	1-6064 and 6066-8376	6122	1-6121 and 6123-8376	6179	1-6178 and 6180-8376
6066	1-6065 and 6067-8376	6123	1-6122 and 6124-8376	6180	1-6179 and 6181-8376
6067	1-6066 and 6068-8376	6124	1-6123 and 6125-8376	6181	1-6180 and 6182-8376
6068	1-6067 and 6069-8376	6125	1-6124 and 6126-8376	6182	1-6181 and 6183-8376
6069	1-6068 and 6070-8376	6126	1-6125 and 6127-8376	6183	1-6182 and 6184-8376
6070	1-6069 and 6071-8376	6127	1-6126 and 6128-8376	6184	1-6183 and 6185-8376
6071	1-6070 and 6072-8376	6128	1-6127 and 6129-8376	6185	1-6184 and 6186-8376
6072	1-6071 and 6073-8376	6129	1-6128 and 6130-8376	6186	1-6185 and 6187-8376
6073	1-6072 and 6074-8376	6130	1-6129 and 6131-8376	6187	1-6186 and 6188-8376
6074	1-6073 and 6075-8376	6131	1-6130 and 6132-8376	6188	1-6187 and 6189-8376
6075	1-6074 and 6076-8376	6132	1-6131 and 6133-8376	6189	1-6188 and 6190-8376
6076	1-6075 and 6077-8376	6133	1-6132 and 6134-8376	6190	1-6189 and 6191-8376
6077	1-6076 and 6078-8376	6134	1-6133 and 6135-8376	6191	1-6190 and 6192-8376
6078	1-6077 and 6079-8376	6135	1-6134 and 6136-8376	6192	1-6191 and 6193-8376
6079	1-6078 and 6080-8376	6136	1-6135 and 6137-8376	6193	1-6192 and 6194-8376
6080	1-6079 and 6081-8376	6137	1-6136 and 6138-8376	6194	1-6193 and 6195-8376
6081	1-6080 and 6082-8376	6138	1-6137 and 6139-8376	6195	1-6194 and 6196-8376
6082	1-6081 and 6083-8376	6139	1-6138 and 6140-8376	6196	1-6195 and 6197-8376
6083	1-6082 and 6084-8376	6140	1-6139 and 6141-8376	6197	1-6196 and 6198-8376
6084	1-6083 and 6085-8376	6141	1-6140 and 6142-8376	6198	1-6197 and 6199-8376
6085	1-6084 and 6086-8376	6142	1-6141 and 6143-8376	6199	1-6198 and 6200-8376
6086	1-6085 and 6087-8376	6143	1-6142 and 6144-8376	6200	1-6199 and 6201-8376
6087	1-6086 and 6088-8376	6144	1-6143 and 6145-8376	6201	1-6200 and 6202-8376
6088	1-6087 and 6089-8376	6145	1-6144 and 6146-8376	6202	1-6201 and 6203-8376
6089	1-6088 and 6090-8376	6146	1-6145 and 6147-8376	6203	1-6202 and 6204-8376
6090	1-6089 and 6091-8376	6147	1-6146 and 6148-8376	6204	1-6203 and 6205-8376
6091	1-6090 and 6092-8376	6148	1-6147 and 6149-8376	6205	1-6204 and 6206-8376
6092	1-6091 and 6093-8376	6149	1-6148 and 6150-8376	6206	1-6205 and 6207-8376
6093	1-6092 and 6094-8376	6150	1-6149 and 6151-8376	6207	1-6206 and 6208-8376
6094	1-6093 and 6095-8376	6151	1-6150 and 6152-8376	6208	1-6207 and 6209-8376
6095	1-6094 and 6096-8376	6152	1-6151 and 6153-8376	6209	1-6208 and 6210-8376
6096	1-6095 and 6097-8376	6153	1-6152 and 6154-8376	6210	1-6209 and 6211-8376
6097	1-6096 and 6098-8376	6154	1-6153 and 6155-8376	6211	1-6210 and 6212-8376
6098	1-6097 and 6099-8376	6155	1-6154 and 6156-8376	6212	1-6211 and 6213-8376
6099	1-6098 and 6100-8376	6156	1-6155 and 6157-8376	6213	1-6212 and 6214-8376
6100	1-6099 and 6101-8376	6157	1-6156 and 6158-8376	6214	1-6213 and 6215-8376
6101	1-6100 and 6102-8376	6158	1-6157 and 6159-8376	6215	1-6214 and 6216-8376
6102	1-6101 and 6103-8376	6159	1-6158 and 6160-8376	6216	1-6215 and 6217-8376
6103	1-6102 and 6104-8376	6160	1-6159 and 6161-8376	6217	1-6216 and 6218-8376
6104	1-6103 and 6105-8376	6161	1-6160 and 6162-8376	6218	1-6217 and 6219-8376
6105	1-6104 and 6106-8376	6162	1-6161 and 6163-8376	6219	1-6218 and 6220-8376
6106	1-6105 and 6107-8376	6163	1-6162 and 6164-8376	6220	1-6219 and 6221-8376
6107	1-6106 and 6108-8376	6164	1-6163 and 6165-8376	6221	1-6220 and 6222-8376
6108	1-6107 and 6109-8376	6165	1-6164 and 6166-8376	6222	1-6221 and 6223-8376
6109	1-6108 and 6110-8376	6166	1-6165 and 6167-8376	6223	1-6222 and 6224-8376
6110	1-6109 and 6111-8376	6167	1-6166 and 6168-8376	6224	1-6223 and 6225-8376
6111	1-6110 and 6112-8376	6168	1-6167 and 6169-8376	6225	1-6224 and 6226-8376
6112	1-6111 and 6113-8376	6169	1-6168 and 6170-8376	6226	1-6225 and 6227-8376
6113	1-6112 and 6114-8376	6170	1-6169 and 6171-8376	6227	1-6226 and 6228-8376

6228	1-6227 and 6229-8376	6285	1-6284 and 6286-8376	6342	1-6341 and 6343-8376
6229	1-6228 and 6230-8376	6286	1-6285 and 6287-8376	6343	1-6342 and 6344-8376
6230	1-6229 and 6231-8376	6287	1-6286 and 6288-8376	6344	1-6343 and 6345-8376
6231	1-6230 and 6232-8376	6288	1-6287 and 6289-8376	6345	1-6344 and 6346-8376
6232	1-6231 and 6233-8376	6289	1-6288 and 6290-8376	6346	1-6345 and 6347-8376
6233	1-6232 and 6234-8376	6290	1-6289 and 6291-8376	6347	1-6346 and 6348-8376
6234	1-6233 and 6235-8376	6291	1-6290 and 6292-8376	6348	1-6347 and 6349-8376
6235	1-6234 and 6236-8376	6292	1-6291 and 6293-8376	6349	1-6348 and 6350-8376
6236	1-6235 and 6237-8376	6293	1-6292 and 6294-8376	6350	1-6349 and 6351-8376
6237	1-6236 and 6238-8376	6294	1-6293 and 6295-8376	6351	1-6350 and 6352-8376
6238	1-6237 and 6239-8376	6295	1-6294 and 6296-8376	6352	1-6351 and 6353-8376
6239	1-6238 and 6240-8376	6296	1-6295 and 6297-8376	6353	1-6352 and 6354-8376
6240	1-6239 and 6241-8376	6297	1-6296 and 6298-8376	6354	1-6353 and 6355-8376
6241	1-6240 and 6242-8376	6298	1-6297 and 6299-8376	6355	1-6354 and 6356-8376
6242	1-6241 and 6243-8376	6299	1-6298 and 6300-8376	6356	1-6355 and 6357-8376
6243	1-6242 and 6244-8376	6300	1-6299 and 6301-8376	6357	1-6356 and 6358-8376
6244	1-6243 and 6245-8376	6301	1-6300 and 6302-8376	6358	1-6357 and 6359-8376
6245	1-6244 and 6246-8376	6302	1-6301 and 6303-8376	6359	1-6358 and 6360-8376
6246	1-6245 and 6247-8376	6303	1-6302 and 6304-8376	6360	1-6359 and 6361-8376
6247	1-6246 and 6248-8376	6304	1-6303 and 6305-8376	6361	1-6360 and 6362-8376
6248	1-6247 and 6249-8376	6305	1-6304 and 6306-8376	6362	1-6361 and 6363-8376
6249	1-6248 and 6250-8376	6306	1-6305 and 6307-8376	6363	1-6362 and 6364-8376
6250	1-6249 and 6251-8376	6307	1-6306 and 6308-8376	6364	1-6363 and 6365-8376
6251	1-6250 and 6252-8376	6308	1-6307 and 6309-8376	6365	1-6364 and 6366-8376
6252	1-6251 and 6253-8376	6309	1-6308 and 6310-8376	6366	1-6365 and 6367-8376
6253	1-6252 and 6254-8376	6310	1-6309 and 6311-8376	6367	1-6366 and 6368-8376
6254	1-6253 and 6255-8376	6311	1-6310 and 6312-8376	6368	1-6367 and 6369-8376
6255	1-6254 and 6256-8376	6312	1-6311 and 6313-8376	6369	1-6368 and 6370-8376
6256	1-6255 and 6257-8376	6313	1-6312 and 6314-8376	6370	1-6369 and 6371-8376
6257	1-6256 and 6258-8376	6314	1-6313 and 6315-8376	6371	1-6370 and 6372-8376
6258	1-6257 and 6259-8376	6315	1-6314 and 6316-8376	6372	1-6371 and 6373-8376
6259	1-6258 and 6260-8376	6316	1-6315 and 6317-8376	6373	1-6372 and 6374-8376
6260	1-6259 and 6261-8376	6317	1-6316 and 6318-8376	6374	1-6373 and 6375-8376
6261	1-6260 and 6262-8376	6318	1-6317 and 6319-8376	6375	1-6374 and 6376-8376
6262	1-6261 and 6263-8376	6319	1-6318 and 6320-8376	6376	1-6375 and 6377-8376
6263	1-6262 and 6264-8376	6320	1-6319 and 6321-8376	6377	1-6376 and 6378-8376
6264	1-6263 and 6265-8376	6321	1-6320 and 6322-8376	6378	1-6377 and 6379-8376
6265	1-6264 and 6266-8376	6322	1-6321 and 6323-8376	6379	1-6378 and 6380-8376
6266	1-6265 and 6267-8376	6323	1-6322 and 6324-8376	6380	1-6379 and 6381-8376
6267	1-6266 and 6268-8376	6324	1-6323 and 6325-8376	6381	1-6380 and 6382-8376
6268	1-6267 and 6269-8376	6325	1-6324 and 6326-8376	6382	1-6381 and 6383-8376
6269	1-6268 and 6270-8376	6326	1-6325 and 6327-8376	6383	1-6382 and 6384-8376
6270	1-6269 and 6271-8376	6327	1-6326 and 6328-8376	6384	1-6383 and 6385-8376
6271	1-6270 and 6272-8376	6328	1-6327 and 6329-8376	6385	1-6384 and 6386-8376
6272	1-6271 and 6273-8376	6329	1-6328 and 6330-8376	6386	1-6385 and 6387-8376
6273	1-6272 and 6274-8376	6330	1-6329 and 6331-8376	6387	1-6386 and 6388-8376
6274	1-6273 and 6275-8376	6331	1-6330 and 6332-8376	6388	1-6387 and 6389-8376
6275	1-6274 and 6276-8376	6332	1-6331 and 6333-8376	6389	1-6388 and 6390-8376
6276	1-6275 and 6277-8376	6333	1-6332 and 6334-8376	6390	1-6389 and 6391-8376
6277	1-6276 and 6278-8376	6334	1-6333 and 6335-8376	6391	1-6390 and 6392-8376
6278	1-6277 and 6279-8376	6335	1-6334 and 6336-8376	6392	1-6391 and 6393-8376
6279	1-6278 and 6280-8376	6336	1-6335 and 6337-8376	6393	1-6392 and 6394-8376
6280	1-6279 and 6281-8376	6337	1-6336 and 6338-8376	6394	1-6393 and 6395-8376
6281	1-6280 and 6282-8376	6338	1-6337 and 6339-8376	6395	1-6394 and 6396-8376
6282	1-6281 and 6283-8376	6339	1-6338 and 6340-8376	6396	1-6395 and 6397-8376
6283	1-6282 and 6284-8376	6340	1-6339 and 6341-8376	6397	1-6396 and 6398-8376
6284	1-6283 and 6285-8376	6341	1-6340 and 6342-8376	6398	1-6397 and 6399-8376

6399	1-6398 and 6400-8376	6456	1-6455 and 6457-8376	6513	1-6512 and 6514-8376
6400	1-6399 and 6401-8376	6457	1-6456 and 6458-8376	6514	1-6513 and 6515-8376
6401	1-6400 and 6402-8376	6458	1-6457 and 6459-8376	6515	1-6514 and 6516-8376
6402	1-6401 and 6403-8376	6459	1-6458 and 6460-8376	6516	1-6515 and 6517-8376
6403	1-6402 and 6404-8376	6460	1-6459 and 6461-8376	6517	1-6516 and 6518-8376
6404	1-6403 and 6405-8376	6461	1-6460 and 6462-8376	6518	1-6517 and 6519-8376
6405	1-6404 and 6406-8376	6462	1-6461 and 6463-8376	6519	1-6518 and 6520-8376
6406	1-6405 and 6407-8376	6463	1-6462 and 6464-8376	6520	1-6519 and 6521-8376
6407	1-6406 and 6408-8376	6464	1-6463 and 6465-8376	6521	1-6520 and 6522-8376
6408	1-6407 and 6409-8376	6465	1-6464 and 6466-8376	6522	1-6521 and 6523-8376
6409	1-6408 and 6410-8376	6466	1-6465 and 6467-8376	6523	1-6522 and 6524-8376
6410	1-6409 and 6411-8376	6467	1-6466 and 6468-8376	6524	1-6523 and 6525-8376
6411	1-6410 and 6412-8376	6468	1-6467 and 6469-8376	6525	1-6524 and 6526-8376
6412	1-6411 and 6413-8376	6469	1-6468 and 6470-8376	6526	1-6525 and 6527-8376
6413	1-6412 and 6414-8376	6470	1-6469 and 6471-8376	6527	1-6526 and 6528-8376
6414	1-6413 and 6415-8376	6471	1-6470 and 6472-8376	6528	1-6527 and 6529-8376
6415	1-6414 and 6416-8376	6472	1-6471 and 6473-8376	6529	1-6528 and 6530-8376
6416	1-6415 and 6417-8376	6473	1-6472 and 6474-8376	6530	1-6529 and 6531-8376
6417	1-6416 and 6418-8376	6474	1-6473 and 6475-8376	6531	1-6530 and 6532-8376
6418	1-6417 and 6419-8376	6475	1-6474 and 6476-8376	6532	1-6531 and 6533-8376
6419	1-6418 and 6420-8376	6476	1-6475 and 6477-8376	6533	1-6532 and 6534-8376
6420	1-6419 and 6421-8376	6477	1-6476 and 6478-8376	6534	1-6533 and 6535-8376
6421	1-6420 and 6422-8376	6478	1-6477 and 6479-8376	6535	1-6534 and 6536-8376
6422	1-6421 and 6423-8376	6479	1-6478 and 6480-8376	6536	1-6535 and 6537-8376
6423	1-6422 and 6424-8376	6480	1-6479 and 6481-8376	6537	1-6536 and 6538-8376
6424	1-6423 and 6425-8376	6481	1-6480 and 6482-8376	6538	1-6537 and 6539-8376
6425	1-6424 and 6426-8376	6482	1-6481 and 6483-8376	6539	1-6538 and 6540-8376
6426	1-6425 and 6427-8376	6483	1-6482 and 6484-8376	6540	1-6539 and 6541-8376
6427	1-6426 and 6428-8376	6484	1-6483 and 6485-8376	6541	1-6540 and 6542-8376
6428	1-6427 and 6429-8376	6485	1-6484 and 6486-8376	6542	1-6541 and 6543-8376
6429	1-6428 and 6430-8376	6486	1-6485 and 6487-8376	6543	1-6542 and 6544-8376
6430	1-6429 and 6431-8376	6487	1-6486 and 6488-8376	6544	1-6543 and 6545-8376
6431	1-6430 and 6432-8376	6488	1-6487 and 6489-8376	6545	1-6544 and 6546-8376
6432	1-6431 and 6433-8376	6489	1-6488 and 6490-8376	6546	1-6545 and 6547-8376
6433	1-6432 and 6434-8376	6490	1-6489 and 6491-8376	6547	1-6546 and 6548-8376
6434	1-6433 and 6435-8376	6491	1-6490 and 6492-8376	6548	1-6547 and 6549-8376
6435	1-6434 and 6436-8376	6492	1-6491 and 6493-8376	6549	1-6548 and 6550-8376
6436	1-6435 and 6437-8376	6493	1-6492 and 6494-8376	6550	1-6549 and 6551-8376
6437	1-6436 and 6438-8376	6494	1-6493 and 6495-8376	6551	1-6550 and 6552-8376
6438	1-6437 and 6439-8376	6495	1-6494 and 6496-8376	6552	1-6551 and 6553-8376
6439	1-6438 and 6440-8376	6496	1-6495 and 6497-8376	6553	1-6552 and 6554-8376
6440	1-6439 and 6441-8376	6497	1-6496 and 6498-8376	6554	1-6553 and 6555-8376
6441	1-6440 and 6442-8376	6498	1-6497 and 6499-8376	6555	1-6554 and 6556-8376
6442	1-6441 and 6443-8376	6499	1-6498 and 6500-8376	6556	1-6555 and 6557-8376
6443	1-6442 and 6444-8376	6500	1-6499 and 6501-8376	6557	1-6556 and 6558-8376
6444	1-6443 and 6445-8376	6501	1-6500 and 6502-8376	6558	1-6557 and 6559-8376
6445	1-6444 and 6446-8376	6502	1-6501 and 6503-8376	6559	1-6558 and 6560-8376
6446	1-6445 and 6447-8376	6503	1-6502 and 6504-8376	6560	1-6559 and 6561-8376
6447	1-6446 and 6448-8376	6504	1-6503 and 6505-8376	6561	1-6560 and 6562-8376
6448	1-6447 and 6449-8376	6505	1-6504 and 6506-8376	6562	1-6561 and 6563-8376
6449	1-6448 and 6450-8376	6506	1-6505 and 6507-8376	6563	1-6562 and 6564-8376
6450	1-6449 and 6451-8376	6507	1-6506 and 6508-8376	6564	1-6563 and 6565-8376
6451	1-6450 and 6452-8376	6508	1-6507 and 6509-8376	6565	1-6564 and 6566-8376
6452	1-6451 and 6453-8376	6509	1-6508 and 6510-8376	6566	1-6565 and 6567-8376
6453	1-6452 and 6454-8376	6510	1-6509 and 6511-8376	6567	1-6566 and 6568-8376
6454	1-6453 and 6455-8376	6511	1-6510 and 6512-8376	6568	1-6567 and 6569-8376
6455	1-6454 and 6456-8376	6512	1-6511 and 6513-8376	6569	1-6568 and 6570-8376

6570	1-6569 and 6571-8376
6571	1-6570 and 6572-8376
6572	1-6571 and 6573-8376
6573	1-6572 and 6574-8376
6574	1-6573 and 6575-8376
6575	1-6574 and 6576-8376
6576	1-6575 and 6577-8376
6577	1-6576 and 6578-8376
6578	1-6577 and 6579-8376
6579	1-6578 and 6580-8376
6580	1-6579 and 6581-8376
6581	1-6580 and 6582-8376
6582	1-6581 and 6583-8376
6583	1-6582 and 6584-8376
6584	1-6583 and 6585-8376
6585	1-6584 and 6586-8376
6586	1-6585 and 6587-8376
6587	1-6586 and 6588-8376
6588	1-6587 and 6589-8376
6589	1-6588 and 6590-8376
6590	1-6589 and 6591-8376
6591	1-6590 and 6592-8376
6592	1-6591 and 6593-8376
6593	1-6592 and 6594-8376
6594	1-6593 and 6595-8376
6595	1-6594 and 6596-8376
6596	1-6595 and 6597-8376
6597	1-6596 and 6598-8376
6598	1-6597 and 6599-8376
6599	1-6598 and 6600-8376
6600	1-6599 and 6601-8376
6601	1-6600 and 6602-8376
6602	1-6601 and 6603-8376
6603	1-6602 and 6604-8376
6604	1-6603 and 6605-8376
6605	1-6604 and 6606-8376
6606	1-6605 and 6607-8376
6607	1-6606 and 6608-8376
6608	1-6607 and 6609-8376
6609	1-6608 and 6610-8376
6610	1-6609 and 6611-8376
6611	1-6610 and 6612-8376
6612	1-6611 and 6613-8376
6613	1-6612 and 6614-8376
6614	1-6613 and 6615-8376
6615	1-6614 and 6616-8376
6616	1-6615 and 6617-8376
6617	1-6616 and 6618-8376
6618	1-6617 and 6619-8376
6619	1-6618 and 6620-8376
6620	1-6619 and 6621-8376
6621	1-6620 and 6622-8376
6622	1-6621 and 6623-8376
6623	1-6622 and 6624-8376
6624	1-6623 and 6625-8376
6625	1-6624 and 6626-8376
6626	1-6625 and 6627-8376

6627	1-6626 and 6628-8376
6628	1-6627 and 6629-8376
6629	1-6628 and 6630-8376
6630	1-6629 and 6631-8376
6631	1-6630 and 6632-8376
6632	1-6631 and 6633-8376
6633	1-6632 and 6634-8376
6634	1-6633 and 6635-8376
6635	1-6634 and 6636-8376
6636	1-6635 and 6637-8376
6637	1-6636 and 6638-8376
6638	1-6637 and 6639-8376
6639	1-6638 and 6640-8376
6640	1-6639 and 6641-8376
6641	1-6640 and 6642-8376
6642	1-6641 and 6643-8376
6643	1-6642 and 6644-8376
6644	1-6643 and 6645-8376
6645	1-6644 and 6646-8376
6646	1-6645 and 6647-8376
6647	1-6646 and 6648-8376
6648	1-6647 and 6649-8376
6649	1-6648 and 6650-8376
6650	1-6649 and 6651-8376
6651	1-6650 and 6652-8376
6652	1-6651 and 6653-8376
6653	1-6652 and 6654-8376
6654	1-6653 and 6655-8376
6655	1-6654 and 6656-8376
6656	1-6655 and 6657-8376
6657	1-6656 and 6658-8376
6658	1-6657 and 6659-8376
6659	1-6658 and 6660-8376
6660	1-6659 and 6661-8376
6661	1-6660 and 6662-8376
6662	1-6661 and 6663-8376
6663	1-6662 and 6664-8376
6664	1-6663 and 6665-8376
6665	1-6664 and 6666-8376
6666	1-6665 and 6667-8376
6667	1-6666 and 6668-8376
6668	1-6667 and 6669-8376
6669	1-6668 and 6670-8376
6670	1-6669 and 6671-8376
6671	1-6670 and 6672-8376
6672	1-6671 and 6673-8376
6673	1-6672 and 6674-8376
6674	1-6673 and 6675-8376
6675	1-6674 and 6676-8376
6676	1-6675 and 6677-8376
6677	1-6676 and 6678-8376
6678	1-6677 and 6679-8376
6679	1-6678 and 6680-8376
6680	1-6679 and 6681-8376
6681	1-6680 and 6682-8376
6682	1-6681 and 6683-8376
6683	1-6682 and 6684-8376

6684	1-6683 and 6685-8376
6685	1-6684 and 6686-8376
6686	1-6685 and 6687-8376
6687	1-6686 and 6688-8376
6688	1-6687 and 6689-8376
6689	1-6688 and 6690-8376
6690	1-6689 and 6691-8376
6691	1-6690 and 6692-8376
6692	1-6691 and 6693-8376
6693	1-6692 and 6694-8376
6694	1-6693 and 6695-8376
6695	1-6694 and 6696-8376
6696	1-6695 and 6697-8376
6697	1-6696 and 6698-8376
6698	1-6697 and 6699-8376
6699	1-6698 and 6700-8376
6700	1-6699 and 6701-8376
6701	1-6700 and 6702-8376
6702	1-6701 and 6703-8376
6703	1-6702 and 6704-8376
6704	1-6703 and 6705-8376
6705	1-6704 and 6706-8376
6706	1-6705 and 6707-8376
6707	1-6706 and 6708-8376
6708	1-6707 and 6709-8376
6709	1-6708 and 6710-8376
6710	1-6709 and 6711-8376
6711	1-6710 and 6712-8376
6712	1-6711 and 6713-8376
6713	1-6712 and 6714-8376
6714	1-6713 and 6715-8376
6715	1-6714 and 6716-8376
6716	1-6715 and 6717-8376
6717	1-6716 and 6718-8376
6718	1-6717 and 6719-8376
6719	1-6718 and 6720-8376
6720	1-6719 and 6721-8376
6721	1-6720 and 6722-8376
6722	1-6721 and 6723-8376
6723	1-6722 and 6724-8376
6724	1-6723 and 6725-8376
6725	1-6724 and 6726-8376
6726	1-6725 and 6727-8376
6727	1-6726 and 6728-8376
6728	1-6727 and 6729-8376
6729	1-6728 and 6730-8376
6730	1-6729 and 6731-8376
6731	1-6730 and 6732-8376
6732	1-6731 and 6733-8376
6733	1-6732 and 6734-8376
6734	1-6733 and 6735-8376
6735	1-6734 and 6736-8376
6736	1-6735 and 6737-8376
6737	1-6736 and 6738-8376
6738	1-6737 and 6739-8376
6739	1-6738 and 6740-8376
6740	1-6739 and 6741-8376

6741	1-6740 and 6742-8376	6798	1-6797 and 6799-8376	6855	1-6854 and 6856-8376
6742	1-6741 and 6743-8376	6799	1-6798 and 6800-8376	6856	1-6855 and 6857-8376
6743	1-6742 and 6744-8376	6800	1-6799 and 6801-8376	6857	1-6856 and 6858-8376
6744	1-6743 and 6745-8376	6801	1-6800 and 6802-8376	6858	1-6857 and 6859-8376
6745	1-6744 and 6746-8376	6802	1-6801 and 6803-8376	6859	1-6858 and 6860-8376
6746	1-6745 and 6747-8376	6803	1-6802 and 6804-8376	6860	1-6859 and 6861-8376
6747	1-6746 and 6748-8376	6804	1-6803 and 6805-8376	6861	1-6860 and 6862-8376
6748	1-6747 and 6749-8376	6805	1-6804 and 6806-8376	6862	1-6861 and 6863-8376
6749	1-6748 and 6750-8376	6806	1-6805 and 6807-8376	6863	1-6862 and 6864-8376
6750	1-6749 and 6751-8376	6807	1-6806 and 6808-8376	6864	1-6863 and 6865-8376
6751	1-6750 and 6752-8376	6808	1-6807 and 6809-8376	6865	1-6864 and 6866-8376
6752	1-6751 and 6753-8376	6809	1-6808 and 6810-8376	6866	1-6865 and 6867-8376
6753	1-6752 and 6754-8376	6810	1-6809 and 6811-8376	6867	1-6866 and 6868-8376
6754	1-6753 and 6755-8376	6811	1-6810 and 6812-8376	6868	1-6867 and 6869-8376
6755	1-6754 and 6756-8376	6812	1-6811 and 6813-8376	6869	1-6868 and 6870-8376
6756	1-6755 and 6757-8376	6813	1-6812 and 6814-8376	6870	1-6869 and 6871-8376
6757	1-6756 and 6758-8376	6814	1-6813 and 6815-8376	6871	1-6870 and 6872-8376
6758	1-6757 and 6759-8376	6815	1-6814 and 6816-8376	6872	1-6871 and 6873-8376
6759	1-6758 and 6760-8376	6816	1-6815 and 6817-8376	6873	1-6872 and 6874-8376
6760	1-6759 and 6761-8376	6817	1-6816 and 6818-8376	6874	1-6873 and 6875-8376
6761	1-6760 and 6762-8376	6818	1-6817 and 6819-8376	6875	1-6874 and 6876-8376
6762	1-6761 and 6763-8376	6819	1-6818 and 6820-8376	6876	1-6875 and 6877-8376
6763	1-6762 and 6764-8376	6820	1-6819 and 6821-8376	6877	1-6876 and 6878-8376
6764	1-6763 and 6765-8376	6821	1-6820 and 6822-8376	6878	1-6877 and 6879-8376
6765	1-6764 and 6766-8376	6822	1-6821 and 6823-8376	6879	1-6878 and 6880-8376
6766	1-6765 and 6767-8376	6823	1-6822 and 6824-8376	6880	1-6879 and 6881-8376
6767	1-6766 and 6768-8376	6824	1-6823 and 6825-8376	6881	1-6880 and 6882-8376
6768	1-6767 and 6769-8376	6825	1-6824 and 6826-8376	6882	1-6881 and 6883-8376
6769	1-6768 and 6770-8376	6826	1-6825 and 6827-8376	6883	1-6882 and 6884-8376
6770	1-6769 and 6771-8376	6827	1-6826 and 6828-8376	6884	1-6883 and 6885-8376
6771	1-6770 and 6772-8376	6828	1-6827 and 6829-8376	6885	1-6884 and 6886-8376
6772	1-6771 and 6773-8376	6829	1-6828 and 6830-8376	6886	1-6885 and 6887-8376
6773	1-6772 and 6774-8376	6830	1-6829 and 6831-8376	6887	1-6886 and 6888-8376
6774	1-6773 and 6775-8376	6831	1-6830 and 6832-8376	6888	1-6887 and 6889-8376
6775	1-6774 and 6776-8376	6832	1-6831 and 6833-8376	6889	1-6888 and 6890-8376
6776	1-6775 and 6777-8376	6833	1-6832 and 6834-8376	6890	1-6889 and 6891-8376
6777	1-6776 and 6778-8376	6834	1-6833 and 6835-8376	6891	1-6890 and 6892-8376
6778	1-6777 and 6779-8376	6835	1-6834 and 6836-8376	6892	1-6891 and 6893-8376
6779	1-6778 and 6780-8376	6836	1-6835 and 6837-8376	6893	1-6892 and 6894-8376
6780	1-6779 and 6781-8376	6837	1-6836 and 6838-8376	6894	1-6893 and 6895-8376
6781	1-6780 and 6782-8376	6838	1-6837 and 6839-8376	6895	1-6894 and 6896-8376
6782	1-6781 and 6783-8376	6839	1-6838 and 6840-8376	6896	1-6895 and 6897-8376
6783	1-6782 and 6784-8376	6840	1-6839 and 6841-8376	6897	1-6896 and 6898-8376
6784	1-6783 and 6785-8376	6841	1-6840 and 6842-8376	6898	1-6897 and 6899-8376
6785	1-6784 and 6786-8376	6842	1-6841 and 6843-8376	6899	1-6898 and 6900-8376
6786	1-6785 and 6787-8376	6843	1-6842 and 6844-8376	6900	1-6899 and 6901-8376
6787	1-6786 and 6788-8376	6844	1-6843 and 6845-8376	6901	1-6900 and 6902-8376
6788	1-6787 and 6789-8376	6845	1-6844 and 6846-8376	6902	1-6901 and 6903-8376
6789	1-6788 and 6790-8376	6846	1-6845 and 6847-8376	6903	1-6902 and 6904-8376
6790	1-6789 and 6791-8376	6847	1-6846 and 6848-8376	6904	1-6903 and 6905-8376
6791	1-6790 and 6792-8376	6848	1-6847 and 6849-8376	6905	1-6904 and 6906-8376
6792	1-6791 and 6793-8376	6849	1-6848 and 6850-8376	6906	1-6905 and 6907-8376
6793	1-6792 and 6794-8376	6850	1-6849 and 6851-8376	6907	1-6906 and 6908-8376
6794	1-6793 and 6795-8376	6851	1-6850 and 6852-8376	6908	1-6907 and 6909-8376
6795	1-6794 and 6796-8376	6852	1-6851 and 6853-8376	6909	1-6908 and 6910-8376
6796	1-6795 and 6797-8376	6853	1-6852 and 6854-8376	6910	1-6909 and 6911-8376
6797	1-6796 and 6798-8376	6854	1-6853 and 6855-8376	6911	1-6910 and 6912-8376

6912	1-6911 and 6913-8376	6969	1-6968 and 6970-8376	7026	1-7025 and 7027-8376
6913	1-6912 and 6914-8376	6970	1-6969 and 6971-8376	7027	1-7026 and 7028-8376
6914	1-6913 and 6915-8376	6971	1-6970 and 6972-8376	7028	1-7027 and 7029-8376
6915	1-6914 and 6916-8376	6972	1-6971 and 6973-8376	7029	1-7028 and 7030-8376
6916	1-6915 and 6917-8376	6973	1-6972 and 6974-8376	7030	1-7029 and 7031-8376
6917	1-6916 and 6918-8376	6974	1-6973 and 6975-8376	7031	1-7030 and 7032-8376
6918	1-6917 and 6919-8376	6975	1-6974 and 6976-8376	7032	1-7031 and 7033-8376
6919	1-6918 and 6920-8376	6976	1-6975 and 6977-8376	7033	1-7032 and 7034-8376
6920	1-6919 and 6921-8376	6977	1-6976 and 6978-8376	7034	1-7033 and 7035-8376
6921	1-6920 and 6922-8376	6978	1-6977 and 6979-8376	7035	1-7034 and 7036-8376
6922	1-6921 and 6923-8376	6979	1-6978 and 6980-8376	7036	1-7035 and 7037-8376
6923	1-6922 and 6924-8376	6980	1-6979 and 6981-8376	7037	1-7036 and 7038-8376
6924	1-6923 and 6925-8376	6981	1-6980 and 6982-8376	7038	1-7037 and 7039-8376
6925	1-6924 and 6926-8376	6982	1-6981 and 6983-8376	7039	1-7038 and 7040-8376
6926	1-6925 and 6927-8376	6983	1-6982 and 6984-8376	7040	1-7039 and 7041-8376
6927	1-6926 and 6928-8376	6984	1-6983 and 6985-8376	7041	1-7040 and 7042-8376
6928	1-6927 and 6929-8376	6985	1-6984 and 6986-8376	7042	1-7041 and 7043-8376
6929	1-6928 and 6930-8376	6986	1-6985 and 6987-8376	7043	1-7042 and 7044-8376
6930	1-6929 and 6931-8376	6987	1-6986 and 6988-8376	7044	1-7043 and 7045-8376
6931	1-6930 and 6932-8376	6988	1-6987 and 6989-8376	7045	1-7044 and 7046-8376
6932	1-6931 and 6933-8376	6989	1-6988 and 6990-8376	7046	1-7045 and 7047-8376
6933	1-6932 and 6934-8376	6990	1-6989 and 6991-8376	7047	1-7046 and 7048-8376
6934	1-6933 and 6935-8376	6991	1-6990 and 6992-8376	7048	1-7047 and 7049-8376
6935	1-6934 and 6936-8376	6992	1-6991 and 6993-8376	7049	1-7048 and 7050-8376
6936	1-6935 and 6937-8376	6993	1-6992 and 6994-8376	7050	1-7049 and 7051-8376
6937	1-6936 and 6938-8376	6994	1-6993 and 6995-8376	7051	1-7050 and 7052-8376
6938	1-6937 and 6939-8376	6995	1-6994 and 6996-8376	7052	1-7051 and 7053-8376
6939	1-6938 and 6940-8376	6996	1-6995 and 6997-8376	7053	1-7052 and 7054-8376
6940	1-6939 and 6941-8376	6997	1-6996 and 6998-8376	7054	1-7053 and 7055-8376
6941	1-6940 and 6942-8376	6998	1-6997 and 6999-8376	7055	1-7054 and 7056-8376
6942	1-6941 and 6943-8376	6999	1-6998 and 7000-8376	7056	1-7055 and 7057-8376
6943	1-6942 and 6944-8376	7000	1-6999 and 7001-8376	7057	1-7056 and 7058-8376
6944	1-6943 and 6945-8376	7001	1-7000 and 7002-8376	7058	1-7057 and 7059-8376
6945	1-6944 and 6946-8376	7002	1-7001 and 7003-8376	7059	1-7058 and 7060-8376
6946	1-6945 and 6947-8376	7003	1-7002 and 7004-8376	7060	1-7059 and 7061-8376
6947	1-6946 and 6948-8376	7004	1-7003 and 7005-8376	7061	1-7060 and 7062-8376
6948	1-6947 and 6949-8376	7005	1-7004 and 7006-8376	7062	1-7061 and 7063-8376
6949	1-6948 and 6950-8376	7006	1-7005 and 7007-8376	7063	1-7062 and 7064-8376
6950	1-6949 and 6951-8376	7007	1-7006 and 7008-8376	7064	1-7063 and 7065-8376
6951	1-6950 and 6952-8376	7008	1-7007 and 7009-8376	7065	1-7064 and 7066-8376
6952	1-6951 and 6953-8376	7009	1-7008 and 7010-8376	7066	1-7065 and 7067-8376
6953	1-6952 and 6954-8376	7010	1-7009 and 7011-8376	7067	1-7066 and 7068-8376
6954	1-6953 and 6955-8376	7011	1-7010 and 7012-8376	7068	1-7067 and 7069-8376
6955	1-6954 and 6956-8376	7012	1-7011 and 7013-8376	7069	1-7068 and 7070-8376
6956	1-6955 and 6957-8376	7013	1-7012 and 7014-8376	7070	1-7069 and 7071-8376
6957	1-6956 and 6958-8376	7014	1-7013 and 7015-8376	7071	1-7070 and 7072-8376
6958	1-6957 and 6959-8376	7015	1-7014 and 7016-8376	7072	1-7071 and 7073-8376
6959	1-6958 and 6960-8376	7016	1-7015 and 7017-8376	7073	1-7072 and 7074-8376
6960	1-6959 and 6961-8376	7017	1-7016 and 7018-8376	7074	1-7073 and 7075-8376
6961	1-6960 and 6962-8376	7018	1-7017 and 7019-8376	7075	1-7074 and 7076-8376
6962	1-6961 and 6963-8376	7019	1-7018 and 7020-8376	7076	1-7075 and 7077-8376
6963	1-6962 and 6964-8376	7020	1-7019 and 7021-8376	7077	1-7076 and 7078-8376
6964	1-6963 and 6965-8376	7021	1-7020 and 7022-8376	7078	1-7077 and 7079-8376
6965	1-6964 and 6966-8376	7022	1-7021 and 7023-8376	7079	1-7078 and 7080-8376
6966	1-6965 and 6967-8376	7023	1-7022 and 7024-8376	7080	1-7079 and 7081-8376
6967	1-6966 and 6968-8376	7024	1-7023 and 7025-8376	7081	1-7080 and 7082-8376
6968	1-6967 and 6969-8376	7025	1-7024 and 7026-8376	7082	1-7081 and 7083-8376



7083	1-7082 and 7084-8376	7140	1-7139 and 7141-8376	7197	1-7196 and 7198-8376
7084	1-7083 and 7085-8376	7141	1-7140 and 7142-8376	7198	1-7197 and 7199-8376
7085	1-7084 and 7086-8376	7142	1-7141 and 7143-8376	7199	1-7198 and 7200-8376
7086	1-7085 and 7087-8376	7143	1-7142 and 7144-8376	7200	1-7199 and 7201-8376
7087	1-7086 and 7088-8376	7144	1-7143 and 7145-8376	7201	1-7200 and 7202-8376
7088	1-7087 and 7089-8376	7145	1-7144 and 7146-8376	7202	1-7201 and 7203-8376
7089	1-7088 and 7090-8376	7146	1-7145 and 7147-8376	7203	1-7202 and 7204-8376
7090	1-7089 and 7091-8376	7147	1-7146 and 7148-8376	7204	1-7203 and 7205-8376
7091	1-7090 and 7092-8376	7148	1-7147 and 7149-8376	7205	1-7204 and 7206-8376
7092	1-7091 and 7093-8376	7149	1-7148 and 7150-8376	7206	1-7205 and 7207-8376
7093	1-7092 and 7094-8376	7150	1-7149 and 7151-8376	7207	1-7206 and 7208-8376
7094	1-7093 and 7095-8376	7151	1-7150 and 7152-8376	7208	1-7207 and 7209-8376
7095	1-7094 and 7096-8376	7152	1-7151 and 7153-8376	7209	1-7208 and 7210-8376
7096	1-7095 and 7097-8376	7153	1-7152 and 7154-8376	7210	1-7209 and 7211-8376
7097	1-7096 and 7098-8376	7154	1-7153 and 7155-8376	7211	1-7210 and 7212-8376
7098	1-7097 and 7099-8376	7155	1-7154 and 7156-8376	7212	1-7211 and 7213-8376
7099	1-7098 and 7100-8376	7156	1-7155 and 7157-8376	7213	1-7212 and 7214-8376
7100	1-7099 and 7101-8376	7157	1-7156 and 7158-8376	7214	1-7213 and 7215-8376
7101	1-7100 and 7102-8376	7158	1-7157 and 7159-8376	7215	1-7214 and 7216-8376
7102	1-7101 and 7103-8376	7159	1-7158 and 7160-8376	7216	1-7215 and 7217-8376
7103	1-7102 and 7104-8376	7160	1-7159 and 7161-8376	7217	1-7216 and 7218-8376
7104	1-7103 and 7105-8376	7161	1-7160 and 7162-8376	7218	1-7217 and 7219-8376
7105	1-7104 and 7106-8376	7162	1-7161 and 7163-8376	7219	1-7218 and 7220-8376
7106	1-7105 and 7107-8376	7163	1-7162 and 7164-8376	7220	1-7219 and 7221-8376
7107	1-7106 and 7108-8376	7164	1-7163 and 7165-8376	7221	1-7220 and 7222-8376
7108	1-7107 and 7109-8376	7165	1-7164 and 7166-8376	7222	1-7221 and 7223-8376
7109	1-7108 and 7110-8376	7166	1-7165 and 7167-8376	7223	1-7222 and 7224-8376
7110	1-7109 and 7111-8376	7167	1-7166 and 7168-8376	7224	1-7223 and 7225-8376
7111	1-7110 and 7112-8376	7168	1-7167 and 7169-8376	7225	1-7224 and 7226-8376
7112	1-7111 and 7113-8376	7169	1-7168 and 7170-8376	7226	1-7225 and 7227-8376
7113	1-7112 and 7114-8376	7170	1-7169 and 7171-8376	7227	1-7226 and 7228-8376
7114	1-7113 and 7115-8376	7171	1-7170 and 7172-8376	7228	1-7227 and 7229-8376
7115	1-7114 and 7116-8376	7172	1-7171 and 7173-8376	7229	1-7228 and 7230-8376
7116	1-7115 and 7117-8376	7173	1-7172 and 7174-8376	7230	1-7229 and 7231-8376
7117	1-7116 and 7118-8376	7174	1-7173 and 7175-8376	7231	1-7230 and 7232-8376
7118	1-7117 and 7119-8376	7175	1-7174 and 7176-8376	7232	1-7231 and 7233-8376
7119	1-7118 and 7120-8376	7176	1-7175 and 7177-8376	7233	1-7232 and 7234-8376
7120	1-7119 and 7121-8376	7177	1-7176 and 7178-8376	7234	1-7233 and 7235-8376
7121	1-7120 and 7122-8376	7178	1-7177 and 7179-8376	7235	1-7234 and 7236-8376
7122	1-7121 and 7123-8376	7179	1-7178 and 7180-8376	7236	1-7235 and 7237-8376
7123	1-7122 and 7124-8376	7180	1-7179 and 7181-8376	7237	1-7236 and 7238-8376
7124	1-7123 and 7125-8376	7181	1-7180 and 7182-8376	7238	1-7237 and 7239-8376
7125	1-7124 and 7126-8376	7182	1-7181 and 7183-8376	7239	1-7238 and 7240-8376
7126	1-7125 and 7127-8376	7183	1-7182 and 7184-8376	7240	1-7239 and 7241-8376
7127	1-7126 and 7128-8376	7184	1-7183 and 7185-8376	7241	1-7240 and 7242-8376
7128	1-7127 and 7129-8376	7185	1-7184 and 7186-8376	7242	1-7241 and 7243-8376
7129	1-7128 and 7130-8376	7186	1-7185 and 7187-8376	7243	1-7242 and 7244-8376
7130	1-7129 and 7131-8376	7187	1-7186 and 7188-8376	7244	1-7243 and 7245-8376
7131	1-7130 and 7132-8376	7188	1-7187 and 7189-8376	7245	1-7244 and 7246-8376
7132	1-7131 and 7133-8376	7189	1-7188 and 7190-8376	7246	1-7245 and 7247-8376
7133	1-7132 and 7134-8376	7190	1-7189 and 7191-8376	7247	1-7246 and 7248-8376
7134	1-7133 and 7135-8376	7191	1-7190 and 7192-8376	7248	1-7247 and 7249-8376
7135	1-7134 and 7136-8376	7192	1-7191 and 7193-8376	7249	1-7248 and 7250-8376
7136	1-7135 and 7137-8376	7193	1-7192 and 7194-8376	7250	1-7249 and 7251-8376
7137	1-7136 and 7138-8376	7194	1-7193 and 7195-8376	7251	1-7250 and 7252-8376
7138	1-7137 and 7139-8376	7195	1-7194 and 7196-8376	7252	1-7251 and 7253-8376
7139	1-7138 and 7140-8376	7196	1-7195 and 7197-8376	7253	1-7252 and 7254-8376



7254	1-7253 and 7255-8376	7311	1-7310 and 7312-8376	7368	1-7367 and 7369-8376
7255	1-7254 and 7256-8376	7312	1-7311 and 7313-8376	7369	1-7368 and 7370-8376
7256	1-7255 and 7257-8376	7313	1-7312 and 7314-8376	7370	1-7369 and 7371-8376
7257	1-7256 and 7258-8376	7314	1-7313 and 7315-8376	7371	1-7370 and 7372-8376
7258	1-7257 and 7259-8376	7315	1-7314 and 7316-8376	7372	1-7371 and 7373-8376
7259	1-7258 and 7260-8376	7316	1-7315 and 7317-8376	7373	1-7372 and 7374-8376
7260	1-7259 and 7261-8376	7317	1-7316 and 7318-8376	7374	1-7373 and 7375-8376
7261	1-7260 and 7262-8376	7318	1-7317 and 7319-8376	7375	1-7374 and 7376-8376
7262	1-7261 and 7263-8376	7319	1-7318 and 7320-8376	7376	1-7375 and 7377-8376
7263	1-7262 and 7264-8376	7320	1-7319 and 7321-8376	7377	1-7376 and 7378-8376
7264	1-7263 and 7265-8376	7321	1-7320 and 7322-8376	7378	1-7377 and 7379-8376
7265	1-7264 and 7266-8376	7322	1-7321 and 7323-8376	7379	1-7378 and 7380-8376
7266	1-7265 and 7267-8376	7323	1-7322 and 7324-8376	7380	1-7379 and 7381-8376
7267	1-7266 and 7268-8376	7324	1-7323 and 7325-8376	7381	1-7380 and 7382-8376
7268	1-7267 and 7269-8376	7325	1-7324 and 7326-8376	7382	1-7381 and 7383-8376
7269	1-7268 and 7270-8376	7326	1-7325 and 7327-8376	7383	1-7382 and 7384-8376
7270	1-7269 and 7271-8376	7327	1-7326 and 7328-8376	7384	1-7383 and 7385-8376
7271	1-7270 and 7272-8376	7328	1-7327 and 7329-8376	7385	1-7384 and 7386-8376
7272	1-7271 and 7273-8376	7329	1-7328 and 7330-8376	7386	1-7385 and 7387-8376
7273	1-7272 and 7274-8376	7330	1-7329 and 7331-8376	7387	1-7386 and 7388-8376
7274	1-7273 and 7275-8376	7331	1-7330 and 7332-8376	7388	1-7387 and 7389-8376
7275	1-7274 and 7276-8376	7332	1-7331 and 7333-8376	7389	1-7388 and 7390-8376
7276	1-7275 and 7277-8376	7333	1-7332 and 7334-8376	7390	1-7389 and 7391-8376
7277	1-7276 and 7278-8376	7334	1-7333 and 7335-8376	7391	1-7390 and 7392-8376
7278	1-7277 and 7279-8376	7335	1-7334 and 7336-8376	7392	1-7391 and 7393-8376
7279	1-7278 and 7280-8376	7336	1-7335 and 7337-8376	7393	1-7392 and 7394-8376
7280	1-7279 and 7281-8376	7337	1-7336 and 7338-8376	7394	1-7393 and 7395-8376
7281	1-7280 and 7282-8376	7338	1-7337 and 7339-8376	7395	1-7394 and 7396-8376
7282	1-7281 and 7283-8376	7339	1-7338 and 7340-8376	7396	1-7395 and 7397-8376
7283	1-7282 and 7284-8376	7340	1-7339 and 7341-8376	7397	1-7396 and 7398-8376
7284	1-7283 and 7285-8376	7341	1-7340 and 7342-8376	7398	1-7397 and 7399-8376
7285	1-7284 and 7286-8376	7342	1-7341 and 7343-8376	7399	1-7398 and 7400-8376
7286	1-7285 and 7287-8376	7343	1-7342 and 7344-8376	7400	1-7399 and 7401-8376
7287	1-7286 and 7288-8376	7344	1-7343 and 7345-8376	7401	1-7400 and 7402-8376
7288	1-7287 and 7289-8376	7345	1-7344 and 7346-8376	7402	1-7401 and 7403-8376
7289	1-7288 and 7290-8376	7346	1-7345 and 7347-8376	7403	1-7402 and 7404-8376
7290	1-7289 and 7291-8376	7347	1-7346 and 7348-8376	7404	1-7403 and 7405-8376
7291	1-7290 and 7292-8376	7348	1-7347 and 7349-8376	7405	1-7404 and 7406-8376
7292	1-7291 and 7293-8376	7349	1-7348 and 7350-8376	7406	1-7405 and 7407-8376
7293	1-7292 and 7294-8376	7350	1-7349 and 7351-8376	7407	1-7406 and 7408-8376
7294	1-7293 and 7295-8376	7351	1-7350 and 7352-8376	7408	1-7407 and 7409-8376
7295	1-7294 and 7296-8376	7352	1-7351 and 7353-8376	7409	1-7408 and 7410-8376
7296	1-7295 and 7297-8376	7353	1-7352 and 7354-8376	7410	1-7409 and 7411-8376
7297	1-7296 and 7298-8376	7354	1-7353 and 7355-8376	7411	1-7410 and 7412-8376
7298	1-7297 and 7299-8376	7355	1-7354 and 7356-8376	7412	1-7411 and 7413-8376
7299	1-7298 and 7300-8376	7356	1-7355 and 7357-8376	7413	1-7412 and 7414-8376
7300	1-7299 and 7301-8376	7357	1-7356 and 7358-8376	7414	1-7413 and 7415-8376
7301	1-7300 and 7302-8376	7358	1-7357 and 7359-8376	7415	1-7414 and 7416-8376
7302	1-7301 and 7303-8376	7359	1-7358 and 7360-8376	7416	1-7415 and 7417-8376
7303	1-7302 and 7304-8376	7360	1-7359 and 7361-8376	7417	1-7416 and 7418-8376
7304	1-7303 and 7305-8376	7361	1-7360 and 7362-8376	7418	1-7417 and 7419-8376
7305	1-7304 and 7306-8376	7362	1-7361 and 7363-8376	7419	1-7418 and 7420-8376
7306	1-7305 and 7307-8376	7363	1-7362 and 7364-8376	7420	1-7419 and 7421-8376
7307	1-7306 and 7308-8376	7364	1-7363 and 7365-8376	7421	1-7420 and 7422-8376
7308	1-7307 and 7309-8376	7365	1-7364 and 7366-8376	7422	1-7421 and 7423-8376
7309	1-7308 and 7310-8376	7366	1-7365 and 7367-8376	7423	1-7422 and 7424-8376
7310	1-7309 and 7311-8376	7367	1-7366 and 7368-8376	7424	1-7423 and 7425-8376

7425	1-7424 and 7426-8376
7426	1-7425 and 7427-8376
7427	1-7426 and 7428-8376
7428	1-7427 and 7429-8376
7429	1-7428 and 7430-8376
7430	1-7429 and 7431-8376
7431	1-7430 and 7432-8376
7432	1-7431 and 7433-8376
7433	1-7432 and 7434-8376
7434	1-7433 and 7435-8376
7435	1-7434 and 7436-8376
7436	1-7435 and 7437-8376
7437	1-7436 and 7438-8376
7438	1-7437 and 7439-8376
7439	1-7438 and 7440-8376
7440	1-7439 and 7441-8376
7441	1-7440 and 7442-8376
7442	1-7441 and 7443-8376
7443	1-7442 and 7444-8376
7444	1-7443 and 7445-8376
7445	1-7444 and 7446-8376
7446	1-7445 and 7447-8376
7447	1-7446 and 7448-8376
7448	1-7447 and 7449-8376
7449	1-7448 and 7450-8376
7450	1-7449 and 7451-8376
7451	1-7450 and 7452-8376
7452	1-7451 and 7453-8376
7453	1-7452 and 7454-8376
7454	1-7453 and 7455-8376
7455	1-7454 and 7456-8376
7456	1-7455 and 7457-8376
7457	1-7456 and 7458-8376
7458	1-7457 and 7459-8376
7459	1-7458 and 7460-8376
7460	1-7459 and 7461-8376
7461	1-7460 and 7462-8376
7462	1-7461 and 7463-8376
7463	1-7462 and 7464-8376
7464	1-7463 and 7465-8376
7465	1-7464 and 7466-8376
7466	1-7465 and 7467-8376
7467	1-7466 and 7468-8376
7468	1-7467 and 7469-8376
7469	1-7468 and 7470-8376
7470	1-7469 and 7471-8376
7471	1-7470 and 7472-8376
7472	1-7471 and 7473-8376
7473	1-7472 and 7474-8376
7474	1-7473 and 7475-8376
7475	1-7474 and 7476-8376
7476	1-7475 and 7477-8376
7477	1-7476 and 7478-8376
7478	1-7477 and 7479-8376
7479	1-7478 and 7480-8376
7480	1-7479 and 7481-8376
7481	1-7480 and 7482-8376

7482	1-7481 and 7483-8376
7483	1-7482 and 7484-8376
7484	1-7483 and 7485-8376
7485	1-7484 and 7486-8376
7486	1-7485 and 7487-8376
7487	1-7486 and 7488-8376
7488	1-7487 and 7489-8376
7489	1-7488 and 7490-8376
7490	1-7489 and 7491-8376
7491	1-7490 and 7492-8376
7492	1-7491 and 7493-8376
7493	1-7492 and 7494-8376
7494	1-7493 and 7495-8376
7495	1-7494 and 7496-8376
7496	1-7495 and 7497-8376
7497	1-7496 and 7498-8376
7498	1-7497 and 7499-8376
7499	1-7498 and 7500-8376
7500	1-7499 and 7501-8376
7501	1-7500 and 7502-8376
7502	1-7501 and 7503-8376
7503	1-7502 and 7504-8376
7504	1-7503 and 7505-8376
7505	1-7504 and 7506-8376
7506	1-7505 and 7507-8376
7507	1-7506 and 7508-8376
7508	1-7507 and 7509-8376
7509	1-7508 and 7510-8376
7510	1-7509 and 7511-8376
7511	1-7510 and 7512-8376
7512	1-7511 and 7513-8376
7513	1-7512 and 7514-8376
7514	1-7513 and 7515-8376
7515	1-7514 and 7516-8376
7516	1-7515 and 7517-8376
7517	1-7516 and 7518-8376
7518	1-7517 and 7519-8376
7519	1-7518 and 7520-8376
7520	1-7519 and 7521-8376
7521	1-7520 and 7522-8376
7522	1-7521 and 7523-8376
7523	1-7522 and 7524-8376
7524	1-7523 and 7525-8376
7525	1-7524 and 7526-8376
7526	1-7525 and 7527-8376
7527	1-7526 and 7528-8376
7528	1-7527 and 7529-8376
7529	1-7528 and 7530-8376
7530	1-7529 and 7531-8376
7531	1-7530 and 7532-8376
7532	1-7531 and 7533-8376
7533	1-7532 and 7534-8376
7534	1-7533 and 7535-8376
7535	1-7534 and 7536-8376
7536	1-7535 and 7537-8376
7537	1-7536 and 7538-8376
7538	1-7537 and 7539-8376

7539	1-7538 and 7540-8376
7540	1-7539 and 7541-8376
7541	1-7540 and 7542-8376
7542	1-7541 and 7543-8376
7543	1-7542 and 7544-8376
7544	1-7543 and 7545-8376
7545	1-7544 and 7546-8376
7546	1-7545 and 7547-8376
7547	1-7546 and 7548-8376
7548	1-7547 and 7549-8376
7549	1-7548 and 7550-8376
7550	1-7549 and 7551-8376
7551	1-7550 and 7552-8376
7552	1-7551 and 7553-8376
7553	1-7552 and 7554-8376
7554	1-7553 and 7555-8376
7555	1-7554 and 7556-8376
7556	1-7555 and 7557-8376
7557	1-7556 and 7558-8376
7558	1-7557 and 7559-8376
7559	1-7558 and 7560-8376
7560	1-7559 and 7561-8376
7561	1-7560 and 7562-8376
7562	1-7561 and 7563-8376
7563	1-7562 and 7564-8376
7564	1-7563 and 7565-8376
7565	1-7564 and 7566-8376
7566	1-7565 and 7567-8376
7567	1-7566 and 7568-8376
7568	1-7567 and 7569-8376
7569	1-7568 and 7570-8376
7570	1-7569 and 7571-8376
7571	1-7570 and 7572-8376
7572	1-7571 and 7573-8376
7573	1-7572 and 7574-8376
7574	1-7573 and 7575-8376
7575	1-7574 and 7576-8376
7576	1-7575 and 7577-8376
7577	1-7576 and 7578-8376
7578	1-7577 and 7579-8376
7579	1-7578 and 7580-8376
7580	1-7579 and 7581-8376
7581	1-7580 and 7582-8376
7582	1-7581 and 7583-8376
7583	1-7582 and 7584-8376
7584	1-7583 and 7585-8376
7585	1-7584 and 7586-8376
7586	1-7585 and 7587-8376
7587	1-7586 and 7588-8376
7588	1-7587 and 7589-8376
7589	1-7588 and 7590-8376
7590	1-7589 and 7591-8376
7591	1-7590 and 7592-8376
7592	1-7591 and 7593-8376
7593	1-7592 and 7594-8376
7594	1-7593 and 7595-8376
7595	1-7594 and 7596-8376

7596	1-7595 and 7597-8376
7597	1-7596 and 7598-8376
7598	1-7597 and 7599-8376
7599	1-7598 and 7600-8376
7600	1-7599 and 7601-8376
7601	1-7600 and 7602-8376
7602	1-7601 and 7603-8376
7603	1-7602 and 7604-8376
7604	1-7603 and 7605-8376
7605	1-7604 and 7606-8376
7606	1-7605 and 7607-8376
7607	1-7606 and 7608-8376
7608	1-7607 and 7609-8376
7609	1-7608 and 7610-8376
7610	1-7609 and 7611-8376
7611	1-7610 and 7612-8376
7612	1-7611 and 7613-8376
7613	1-7612 and 7614-8376
7614	1-7613 and 7615-8376
7615	1-7614 and 7616-8376
7616	1-7615 and 7617-8376
7617	1-7616 and 7618-8376
7618	1-7617 and 7619-8376
7619	1-7618 and 7620-8376
7620	1-7619 and 7621-8376
7621	1-7620 and 7622-8376
7622	1-7621 and 7623-8376
7623	1-7622 and 7624-8376
7624	1-7623 and 7625-8376
7625	1-7624 and 7626-8376
7626	1-7625 and 7627-8376
7627	1-7626 and 7628-8376
7628	1-7627 and 7629-8376
7629	1-7628 and 7630-8376
7630	1-7629 and 7631-8376
7631	1-7630 and 7632-8376
7632	1-7631 and 7633-8376
7633	1-7632 and 7634-8376
7634	1-7633 and 7635-8376
7635	1-7634 and 7636-8376
7636	1-7635 and 7637-8376
7637	1-7636 and 7638-8376
7638	1-7637 and 7639-8376
7639	1-7638 and 7640-8376
7640	1-7639 and 7641-8376
7641	1-7640 and 7642-8376
7642	1-7641 and 7643-8376
7643	1-7642 and 7644-8376
7644	1-7643 and 7645-8376
7645	1-7644 and 7646-8376
7646	1-7645 and 7647-8376
7647	1-7646 and 7648-8376
7648	1-7647 and 7649-8376
7649	1-7648 and 7650-8376
7650	1-7649 and 7651-8376
7651	1-7650 and 7652-8376
7652	1-7651 and 7653-8376

7653	1-7652 and 7654-8376
7654	1-7653 and 7655-8376
7655	1-7654 and 7656-8376
7656	1-7655 and 7657-8376
7657	1-7656 and 7658-8376
7658	1-7657 and 7659-8376
7659	1-7658 and 7660-8376
7660	1-7659 and 7661-8376
7661	1-7660 and 7662-8376
7662	1-7661 and 7663-8376
7663	1-7662 and 7664-8376
7664	1-7663 and 7665-8376
7665	1-7664 and 7666-8376
7666	1-7665 and 7667-8376
7667	1-7666 and 7668-8376
7668	1-7667 and 7669-8376
7669	1-7668 and 7670-8376
7670	1-7669 and 7671-8376
7671	1-7670 and 7672-8376
7672	1-7671 and 7673-8376
7673	1-7672 and 7674-8376
7674	1-7673 and 7675-8376
7675	1-7674 and 7676-8376
7676	1-7675 and 7677-8376
7677	1-7676 and 7678-8376
7678	1-7677 and 7679-8376
7679	1-7678 and 7680-8376
7680	1-7679 and 7681-8376
7681	1-7680 and 7682-8376
7682	1-7681 and 7683-8376
7683	1-7682 and 7684-8376
7684	1-7683 and 7685-8376
7685	1-7684 and 7686-8376
7686	1-7685 and 7687-8376
7687	1-7686 and 7688-8376
7688	1-7687 and 7689-8376
7689	1-7688 and 7690-8376
7690	1-7689 and 7691-8376
7691	1-7690 and 7692-8376
7692	1-7691 and 7693-8376
7693	1-7692 and 7694-8376
7694	1-7693 and 7695-8376
7695	1-7694 and 7696-8376
7696	1-7695 and 7697-8376
7697	1-7696 and 7698-8376
7698	1-7697 and 7699-8376
7699	1-7698 and 7700-8376
7700	1-7699 and 7701-8376
7701	1-7700 and 7702-8376
7702	1-7701 and 7703-8376
7703	1-7702 and 7704-8376
7704	1-7703 and 7705-8376
7705	1-7704 and 7706-8376
7706	1-7705 and 7707-8376
7707	1-7706 and 7708-8376
7708	1-7707 and 7709-8376
7709	1-7708 and 7710-8376

7710	1-7709 and 7711-8376
7711	1-7710 and 7712-8376
7712	1-7711 and 7713-8376
7713	1-7712 and 7714-8376
7714	1-7713 and 7715-8376
7715	1-7714 and 7716-8376
7716	1-7715 and 7717-8376
7717	1-7716 and 7718-8376
7718	1-7717 and 7719-8376
7719	1-7718 and 7720-8376
7720	1-7719 and 7721-8376
7721	1-7720 and 7722-8376
7722	1-7721 and 7723-8376
7723	1-7722 and 7724-8376
7724	1-7723 and 7725-8376
7725	1-7724 and 7726-8376
7726	1-7725 and 7727-8376
7727	1-7726 and 7728-8376
7728	1-7727 and 7729-8376
7729	1-7728 and 7730-8376
7730	1-7729 and 7731-8376
7731	1-7730 and 7732-8376
7732	1-7731 and 7733-8376
7733	1-7732 and 7734-8376
7734	1-7733 and 7735-8376
7735	1-7734 and 7736-8376
7736	1-7735 and 7737-8376
7737	1-7736 and 7738-8376
7738	1-7737 and 7739-8376
7739	1-7738 and 7740-8376
7740	1-7739 and 7741-8376
7741	1-7740 and 7742-8376
7742	1-7741 and 7743-8376
7743	1-7742 and 7744-8376
7744	1-7743 and 7745-8376
7745	1-7744 and 7746-8376
7746	1-7745 and 7747-8376
7747	1-7746 and 7748-8376
7748	1-7747 and 7749-8376
7749	1-7748 and 7750-8376
7750	1-7749 and 7751-8376
7751	1-7750 and 7752-8376
7752	1-7751 and 7753-8376
7753	1-7752 and 7754-8376
7754	1-7753 and 7755-8376
7755	1-7754 and 7756-8376
7756	1-7755 and 7757-8376
7757	1-7756 and 7758-8376
7758	1-7757 and 7759-8376
7759	1-7758 and 7760-8376
7760	1-7759 and 7761-8376
7761	1-7760 and 7762-8376
7762	1-7761 and 7763-8376
7763	1-7762 and 7764-8376
7764	1-7763 and 7765-8376
7765	1-7764 and 7766-8376
7766	1-7765 and 7767-8376

7767	1-7766 and 7768-8376
7768	1-7767 and 7769-8376
7769	1-7768 and 7770-8376
7770	1-7769 and 7771-8376
7771	1-7770 and 7772-8376
7772	1-7771 and 7773-8376
7773	1-7772 and 7774-8376
7774	1-7773 and 7775-8376
7775	1-7774 and 7776-8376
7776	1-7775 and 7777-8376
7777	1-7776 and 7778-8376
7778	1-7777 and 7779-8376
7779	1-7778 and 7780-8376
7780	1-7779 and 7781-8376
7781	1-7780 and 7782-8376
7782	1-7781 and 7783-8376
7783	1-7782 and 7784-8376
7784	1-7783 and 7785-8376
7785	1-7784 and 7786-8376
7786	1-7785 and 7787-8376
7787	1-7786 and 7788-8376
7788	1-7787 and 7789-8376
7789	1-7788 and 7790-8376
7790	1-7789 and 7791-8376
7791	1-7790 and 7792-8376
7792	1-7791 and 7793-8376
7793	1-7792 and 7794-8376
7794	1-7793 and 7795-8376
7795	1-7794 and 7796-8376
7796	1-7795 and 7797-8376
7797	1-7796 and 7798-8376
7798	1-7797 and 7799-8376
7799	1-7798 and 7800-8376
7800	1-7799 and 7801-8376
7801	1-7800 and 7802-8376
7802	1-7801 and 7803-8376
7803	1-7802 and 7804-8376
7804	1-7803 and 7805-8376
7805	1-7804 and 7806-8376
7806	1-7805 and 7807-8376
7807	1-7806 and 7808-8376
7808	1-7807 and 7809-8376
7809	1-7808 and 7810-8376
7810	1-7809 and 7811-8376
7811	1-7810 and 7812-8376
7812	1-7811 and 7813-8376
7813	1-7812 and 7814-8376
7814	1-7813 and 7815-8376
7815	1-7814 and 7816-8376
7816	1-7815 and 7817-8376
7817	1-7816 and 7818-8376
7818	1-7817 and 7819-8376
7819	1-7818 and 7820-8376
7820	1-7819 and 7821-8376
7821	1-7820 and 7822-8376
7822	1-7821 and 7823-8376
7823	1-7822 and 7824-8376

7824	1-7823 and 7825-8376
7825	1-7824 and 7826-8376
7826	1-7825 and 7827-8376
7827	1-7826 and 7828-8376
7828	1-7827 and 7829-8376
7829	1-7828 and 7830-8376
7830	1-7829 and 7831-8376
7831	1-7830 and 7832-8376
7832	1-7831 and 7833-8376
7833	1-7832 and 7834-8376
7834	1-7833 and 7835-8376
7835	1-7834 and 7836-8376
7836	1-7835 and 7837-8376
7837	1-7836 and 7838-8376
7838	1-7837 and 7839-8376
7839	1-7838 and 7840-8376
7840	1-7839 and 7841-8376
7841	1-7840 and 7842-8376
7842	1-7841 and 7843-8376
7843	1-7842 and 7844-8376
7844	1-7843 and 7845-8376
7845	1-7844 and 7846-8376
7846	1-7845 and 7847-8376
7847	1-7846 and 7848-8376
7848	1-7847 and 7849-8376
7849	1-7848 and 7850-8376
7850	1-7849 and 7851-8376
7851	1-7850 and 7852-8376
7852	1-7851 and 7853-8376
7853	1-7852 and 7854-8376
7854	1-7853 and 7855-8376
7855	1-7854 and 7856-8376
7856	1-7855 and 7857-8376
7857	1-7856 and 7858-8376
7858	1-7857 and 7859-8376
7859	1-7858 and 7860-8376
7860	1-7859 and 7861-8376
7861	1-7860 and 7862-8376
7862	1-7861 and 7863-8376
7863	1-7862 and 7864-8376
7864	1-7863 and 7865-8376
7865	1-7864 and 7866-8376
7866	1-7865 and 7867-8376
7867	1-7866 and 7868-8376
7868	1-7867 and 7869-8376
7869	1-7868 and 7870-8376
7870	1-7869 and 7871-8376
7871	1-7870 and 7872-8376
7872	1-7871 and 7873-8376
7873	1-7872 and 7874-8376
7874	1-7873 and 7875-8376
7875	1-7874 and 7876-8376
7876	1-7875 and 7877-8376
7877	1-7876 and 7878-8376
7878	1-7877 and 7879-8376
7879	1-7878 and 7880-8376
7880	1-7879 and 7881-8376

7881	1-7880 and 7882-8376
7882	1-7881 and 7883-8376
7883	1-7882 and 7884-8376
7884	1-7883 and 7885-8376
7885	1-7884 and 7886-8376
7886	1-7885 and 7887-8376
7887	1-7886 and 7888-8376
7888	1-7887 and 7889-8376
7889	1-7888 and 7890-8376
7890	1-7889 and 7891-8376
7891	1-7890 and 7892-8376
7892	1-7891 and 7893-8376
7893	1-7892 and 7894-8376
7894	1-7893 and 7895-8376
7895	1-7894 and 7896-8376
7896	1-7895 and 7897-8376
7897	1-7896 and 7898-8376
7898	1-7897 and 7899-8376
7899	1-7898 and 7900-8376
7900	1-7899 and 7901-8376
7901	1-7900 and 7902-8376
7902	1-7901 and 7903-8376
7903	1-7902 and 7904-8376
7904	1-7903 and 7905-8376
7905	1-7904 and 7906-8376
7906	1-7905 and 7907-8376
7907	1-7906 and 7908-8376
7908	1-7907 and 7909-8376
7909	1-7908 and 7910-8376
7910	1-7909 and 7911-8376
7911	1-7910 and 7912-8376
7912	1-7911 and 7913-8376
7913	1-7912 and 7914-8376
7914	1-7913 and 7915-8376
7915	1-7914 and 7916-8376
7916	1-7915 and 7917-8376
7917	1-7916 and 7918-8376
7918	1-7917 and 7919-8376
7919	1-7918 and 7920-8376
7920	1-7919 and 7921-8376
7921	1-7920 and 7922-8376
7922	1-7921 and 7923-8376
7923	1-7922 and 7924-8376
7924	1-7923 and 7925-8376
7925	1-7924 and 7926-8376
7926	1-7925 and 7927-8376
7927	1-7926 and 7928-8376
7928	1-7927 and 7929-8376
7929	1-7928 and 7930-8376
7930	1-7929 and 7931-8376
7931	1-7930 and 7932-8376
7932	1-7931 and 7933-8376
7933	1-7932 and 7934-8376
7934	1-7933 and 7935-8376
7935	1-7934 and 7936-8376
7936	1-7935 and 7937-8376
7937	1-7936 and 7938-8376

7938	1-7937 and 7939-8376
7939	1-7938 and 7940-8376
7940	1-7939 and 7941-8376
7941	1-7940 and 7942-8376
7942	1-7941 and 7943-8376
7943	1-7942 and 7944-8376
7944	1-7943 and 7945-8376
7945	1-7944 and 7946-8376
7946	1-7945 and 7947-8376
7947	1-7946 and 7948-8376
7948	1-7947 and 7949-8376
7949	1-7948 and 7950-8376
7950	1-7949 and 7951-8376
7951	1-7950 and 7952-8376
7952	1-7951 and 7953-8376
7953	1-7952 and 7954-8376
7954	1-7953 and 7955-8376
7955	1-7954 and 7956-8376
7956	1-7955 and 7957-8376
7957	1-7956 and 7958-8376
7958	1-7957 and 7959-8376
7959	1-7958 and 7960-8376
7960	1-7959 and 7961-8376
7961	1-7960 and 7962-8376
7962	1-7961 and 7963-8376
7963	1-7962 and 7964-8376
7964	1-7963 and 7965-8376
7965	1-7964 and 7966-8376
7966	1-7965 and 7967-8376
7967	1-7966 and 7968-8376
7968	1-7967 and 7969-8376
7969	1-7968 and 7970-8376
7970	1-7969 and 7971-8376
7971	1-7970 and 7972-8376
7972	1-7971 and 7973-8376
7973	1-7972 and 7974-8376
7974	1-7973 and 7975-8376
7975	1-7974 and 7976-8376
7976	1-7975 and 7977-8376
7977	1-7976 and 7978-8376
7978	1-7977 and 7979-8376
7979	1-7978 and 7980-8376
7980	1-7979 and 7981-8376
7981	1-7980 and 7982-8376
7982	1-7981 and 7983-8376
7983	1-7982 and 7984-8376
7984	1-7983 and 7985-8376
7985	1-7984 and 7986-8376
7986	1-7985 and 7987-8376
7987	1-7986 and 7988-8376
7988	1-7987 and 7989-8376
7989	1-7988 and 7990-8376
7990	1-7989 and 7991-8376
7991	1-7990 and 7992-8376
7992	1-7991 and 7993-8376
7993	1-7992 and 7994-8376
7994	1-7993 and 7995-8376

7995	1-7994 and 7996-8376
7996	1-7995 and 7997-8376
7997	1-7996 and 7998-8376
7998	1-7997 and 7999-8376
7999	1-7998 and 8000-8376
8000	1-7999 and 8001-8376
8001	1-8000 and 8002-8376
8002	1-8001 and 8003-8376
8003	1-8002 and 8004-8376
8004	1-8003 and 8005-8376
8005	1-8004 and 8006-8376
8006	1-8005 and 8007-8376
8007	1-8006 and 8008-8376
8008	1-8007 and 8009-8376
8009	1-8008 and 8010-8376
8010	1-8009 and 8011-8376
8011	1-8010 and 8012-8376
8012	1-8011 and 8013-8376
8013	1-8012 and 8014-8376
8014	1-8013 and 8015-8376
8015	1-8014 and 8016-8376
8016	1-8015 and 8017-8376
8017	1-8016 and 8018-8376
8018	1-8017 and 8019-8376
8019	1-8018 and 8020-8376
8020	1-8019 and 8021-8376
8021	1-8020 and 8022-8376
8022	1-8021 and 8023-8376
8023	1-8022 and 8024-8376
8024	1-8023 and 8025-8376
8025	1-8024 and 8026-8376
8026	1-8025 and 8027-8376
8027	1-8026 and 8028-8376
8028	1-8027 and 8029-8376
8029	1-8028 and 8030-8376
8030	1-8029 and 8031-8376
8031	1-8030 and 8032-8376
8032	1-8031 and 8033-8376
8033	1-8032 and 8034-8376
8034	1-8033 and 8035-8376
8035	1-8034 and 8036-8376
8036	1-8035 and 8037-8376
8037	1-8036 and 8038-8376
8038	1-8037 and 8039-8376
8039	1-8038 and 8040-8376
8040	1-8039 and 8041-8376
8041	1-8040 and 8042-8376
8042	1-8041 and 8043-8376
8043	1-8042 and 8044-8376
8044	1-8043 and 8045-8376
8045	1-8044 and 8046-8376
8046	1-8045 and 8047-8376
8047	1-8046 and 8048-8376
8048	1-8047 and 8049-8376
8049	1-8048 and 8050-8376
8050	1-8049 and 8051-8376
8051	1-8050 and 8052-8376

8052	1-8051 and 8053-8376
8053	1-8052 and 8054-8376
8054	1-8053 and 8055-8376
8055	1-8054 and 8056-8376
8056	1-8055 and 8057-8376
8057	1-8056 and 8058-8376
8058	1-8057 and 8059-8376
8059	1-8058 and 8060-8376
8060	1-8059 and 8061-8376
8061	1-8060 and 8062-8376
8062	1-8061 and 8063-8376
8063	1-8062 and 8064-8376
8064	1-8063 and 8065-8376
8065	1-8064 and 8066-8376
8066	1-8065 and 8067-8376
8067	1-8066 and 8068-8376
8068	1-8067 and 8069-8376
8069	1-8068 and 8070-8376
8070	1-8069 and 8071-8376
8071	1-8070 and 8072-8376
8072	1-8071 and 8073-8376
8073	1-8072 and 8074-8376
8074	1-8073 and 8075-8376
8075	1-8074 and 8076-8376
8076	1-8075 and 8077-8376
8077	1-8076 and 8078-8376
8078	1-8077 and 8079-8376
8079	1-8078 and 8080-8376
8080	1-8079 and 8081-8376
8081	1-8080 and 8082-8376
8082	1-8081 and 8083-8376
8083	1-8082 and 8084-8376
8084	1-8083 and 8085-8376
8085	1-8084 and 8086-8376
8086	1-8085 and 8087-8376
8087	1-8086 and 8088-8376
8088	1-8087 and 8089-8376
8089	1-8088 and 8090-8376
8090	1-8089 and 8091-8376
8091	1-8090 and 8092-8376
8092	1-8091 and 8093-8376
8093	1-8092 and 8094-8376
8094	1-8093 and 8095-8376
8095	1-8094 and 8096-8376
8096	1-8095 and 8097-8376
8097	1-8096 and 8098-8376
8098	1-8097 and 8099-8376
8099	1-8098 and 8100-8376
8100	1-8099 and 8101-8376
8101	1-8100 and 8102-8376
8102	1-8101 and 8103-8376
8103	1-8102 and 8104-8376
8104	1-8103 and 8105-8376
8105	1-8104 and 8106-8376
8106	1-8105 and 8107-8376
8107	1-8106 and 8108-8376
8108	1-8107 and 8109-8376

8109	1-8108 and 8110-8376
8110	1-8109 and 8111-8376
8111	1-8110 and 8112-8376
8112	1-8111 and 8113-8376
8113	1-8112 and 8114-8376
8114	1-8113 and 8115-8376
8115	1-8114 and 8116-8376
8116	1-8115 and 8117-8376
8117	1-8116 and 8118-8376
8118	1-8117 and 8119-8376
8119	1-8118 and 8120-8376
8120	1-8119 and 8121-8376
8121	1-8120 and 8122-8376
8122	1-8121 and 8123-8376
8123	1-8122 and 8124-8376
8124	1-8123 and 8125-8376
8125	1-8124 and 8126-8376
8126	1-8125 and 8127-8376
8127	1-8126 and 8128-8376
8128	1-8127 and 8129-8376
8129	1-8128 and 8130-8376
8130	1-8129 and 8131-8376
8131	1-8130 and 8132-8376
8132	1-8131 and 8133-8376
8133	1-8132 and 8134-8376
8134	1-8133 and 8135-8376
8135	1-8134 and 8136-8376
8136	1-8135 and 8137-8376
8137	1-8136 and 8138-8376
8138	1-8137 and 8139-8376
8139	1-8138 and 8140-8376
8140	1-8139 and 8141-8376
8141	1-8140 and 8142-8376
8142	1-8141 and 8143-8376
8143	1-8142 and 8144-8376
8144	1-8143 and 8145-8376
8145	1-8144 and 8146-8376
8146	1-8145 and 8147-8376
8147	1-8146 and 8148-8376
8148	1-8147 and 8149-8376
8149	1-8148 and 8150-8376
8150	1-8149 and 8151-8376
8151	1-8150 and 8152-8376
8152	1-8151 and 8153-8376
8153	1-8152 and 8154-8376
8154	1-8153 and 8155-8376
8155	1-8154 and 8156-8376
8156	1-8155 and 8157-8376
8157	1-8156 and 8158-8376
8158	1-8157 and 8159-8376
8159	1-8158 and 8160-8376
8160	1-8159 and 8161-8376
8161	1-8160 and 8162-8376
8162	1-8161 and 8163-8376
8163	1-8162 and 8164-8376
8164	1-8163 and 8165-8376
8165	1-8164 and 8166-8376

8166	1-8165 and 8167-8376
8167	1-8166 and 8168-8376
8168	1-8167 and 8169-8376
8169	1-8168 and 8170-8376
8170	1-8169 and 8171-8376
8171	1-8170 and 8172-8376
8172	1-8171 and 8173-8376
8173	1-8172 and 8174-8376
8174	1-8173 and 8175-8376
8175	1-8174 and 8176-8376
8176	1-8175 and 8177-8376
8177	1-8176 and 8178-8376
8178	1-8177 and 8179-8376
8179	1-8178 and 8180-8376
8180	1-8179 and 8181-8376
8181	1-8180 and 8182-8376
8182	1-8181 and 8183-8376
8183	1-8182 and 8184-8376
8184	1-8183 and 8185-8376
8185	1-8184 and 8186-8376
8186	1-8185 and 8187-8376
8187	1-8186 and 8188-8376
8188	1-8187 and 8189-8376
8189	1-8188 and 8190-8376
8190	1-8189 and 8191-8376
8191	1-8190 and 8192-8376
8192	1-8191 and 8193-8376
8193	1-8192 and 8194-8376
8194	1-8193 and 8195-8376
8195	1-8194 and 8196-8376
8196	1-8195 and 8197-8376
8197	1-8196 and 8198-8376
8198	1-8197 and 8199-8376
8199	1-8198 and 8200-8376
8200	1-8199 and 8201-8376
8201	1-8200 and 8202-8376
8202	1-8201 and 8203-8376
8203	1-8202 and 8204-8376
8204	1-8203 and 8205-8376
8205	1-8204 and 8206-8376
8206	1-8205 and 8207-8376
8207	1-8206 and 8208-8376
8208	1-8207 and 8209-8376
8209	1-8208 and 8210-8376
8210	1-8209 and 8211-8376
8211	1-8210 and 8212-8376
8212	1-8211 and 8213-8376
8213	1-8212 and 8214-8376
8214	1-8213 and 8215-8376
8215	1-8214 and 8216-8376
8216	1-8215 and 8217-8376
8217	1-8216 and 8218-8376
8218	1-8217 and 8219-8376
8219	1-8218 and 8220-8376
8220	1-8219 and 8221-8376
8221	1-8220 and 8222-8376
8222	1-8221 and 8223-8376

8223	1-8222 and 8224-8376
8224	1-8223 and 8225-8376
8225	1-8224 and 8226-8376
8226	1-8225 and 8227-8376
8227	1-8226 and 8228-8376
8228	1-8227 and 8229-8376
8229	1-8228 and 8230-8376
8230	1-8229 and 8231-8376
8231	1-8230 and 8232-8376
8232	1-8231 and 8233-8376
8233	1-8232 and 8234-8376
8234	1-8233 and 8235-8376
8235	1-8234 and 8236-8376
8236	1-8235 and 8237-8376
8237	1-8236 and 8238-8376
8238	1-8237 and 8239-8376
8239	1-8238 and 8240-8376
8240	1-8239 and 8241-8376
8241	1-8240 and 8242-8376
8242	1-8241 and 8243-8376
8243	1-8242 and 8244-8376
8244	1-8243 and 8245-8376
8245	1-8244 and 8246-8376
8246	1-8245 and 8247-8376
8247	1-8246 and 8248-8376
8248	1-8247 and 8249-8376
8249	1-8248 and 8250-8376
8250	1-8249 and 8251-8376
8251	1-8250 and 8252-8376
8252	1-8251 and 8253-8376
8253	1-8252 and 8254-8376
8254	1-8253 and 8255-8376
8255	1-8254 and 8256-8376
8256	1-8255 and 8257-8376
8257	1-8256 and 8258-8376
8258	1-8257 and 8259-8376
8259	1-8258 and 8260-8376
8260	1-8259 and 8261-8376
8261	1-8260 and 8262-8376
8262	1-8261 and 8263-8376
8263	1-8262 and 8264-8376
8264	1-8263 and 8265-8376
8265	1-8264 and 8266-8376
8266	1-8265 and 8267-8376
8267	1-8266 and 8268-8376
8268	1-8267 and 8269-8376
8269	1-8268 and 8270-8376
8270	1-8269 and 8271-8376
8271	1-8270 and 8272-8376
8272	1-8271 and 8273-8376
8273	1-8272 and 8274-8376
8274	1-8273 and 8275-8376
8275	1-8274 and 8276-8376
8276	1-8275 and 8277-8376
8277	1-8276 and 8278-8376
8278	1-8277 and 8279-8376
8279	1-8278 and 8280-8376

8280	1-8279 and 8281-8376	8313	1-8312 and 8314-8376	8346	1-8345 and 8347-8376
8281	1-8280 and 8282-8376	8314	1-8313 and 8315-8376	8347	1-8346 and 8348-8376
8282	1-8281 and 8283-8376	8315	1-8314 and 8316-8376	8348	1-8347 and 8349-8376
8283	1-8282 and 8284-8376	8316	1-8315 and 8317-8376	8349	1-8348 and 8350-8376
8284	1-8283 and 8285-8376	8317	1-8316 and 8318-8376	8350	1-8349 and 8351-8376
8285	1-8284 and 8286-8376	8318	1-8317 and 8319-8376	8351	1-8350 and 8352-8376
8286	1-8285 and 8287-8376	8319	1-8318 and 8320-8376	8352	1-8351 and 8353-8376
8287	1-8286 and 8288-8376	8320	1-8319 and 8321-8376	8353	1-8352 and 8354-8376
8288	1-8287 and 8289-8376	8321	1-8320 and 8322-8376	8354	1-8353 and 8355-8376
8289	1-8288 and 8290-8376	8322	1-8321 and 8323-8376	8355	1-8354 and 8356-8376
8290	1-8289 and 8291-8376	8323	1-8322 and 8324-8376	8356	1-8355 and 8357-8376
8291	1-8290 and 8292-8376	8324	1-8323 and 8325-8376	8357	1-8356 and 8358-8376
8292	1-8291 and 8293-8376	8325	1-8324 and 8326-8376	8358	1-8357 and 8359-8376
8293	1-8292 and 8294-8376	8326	1-8325 and 8327-8376	8359	1-8358 and 8360-8376
8294	1-8293 and 8295-8376	8327	1-8326 and 8328-8376	8360	1-8359 and 8361-8376
8295	1-8294 and 8296-8376	8328	1-8327 and 8329-8376	8361	1-8360 and 8362-8376
8296	1-8295 and 8297-8376	8329	1-8328 and 8330-8376	8362	1-8361 and 8363-8376
8297	1-8296 and 8298-8376	8330	1-8329 and 8331-8376	8363	1-8362 and 8364-8376
8298	1-8297 and 8299-8376	8331	1-8330 and 8332-8376	8364	1-8363 and 8365-8376
8299	1-8298 and 8300-8376	8332	1-8331 and 8333-8376	8365	1-8364 and 8366-8376
8300	1-8299 and 8301-8376	8333	1-8332 and 8334-8376	8366	1-8365 and 8367-8376
8301	1-8300 and 8302-8376	8334	1-8333 and 8335-8376	8367	1-8366 and 8368-8376
8302	1-8301 and 8303-8376	8335	1-8334 and 8336-8376	8368	1-8367 and 8369-8376
8303	1-8302 and 8304-8376	8336	1-8335 and 8337-8376	8369	1-8368 and 8370-8376
8304	1-8303 and 8305-8376	8337	1-8336 and 8338-8376	8370	1-8369 and 8371-8376
8305	1-8304 and 8306-8376	8338	1-8337 and 8339-8376	8371	1-8370 and 8372-8376
8306	1-8305 and 8307-8376	8339	1-8338 and 8340-8376	8372	1-8371 and 8373-8376
8307	1-8306 and 8308-8376	8340	1-8339 and 8341-8376	8373	1-8372 and 8374-8376
8308	1-8307 and 8309-8376	8341	1-8340 and 8342-8376	8374	1-8373 and 8375-8376
8309	1-8308 and 8310-8376	8342	1-8341 and 8343-8376	8375	1-8374 and 8376
8310	1-8309 and 8311-8376	8343	1-8342 and 8344-8376	8376	1-8375
8311	1-8310 and 8312-8376	8344	1-8343 and 8345-8376		
8312	1-8311 and 8313-8376	8345	1-8344 and 8346-8376		

Thus the invention includes each of the 35074500 possible pairs of SEQ IDs 1-8376 (1&2, 1&3, 1&4, 1&5 ... 1&8375, 1&8376, 2&3, 2&4, 2&5 ... 2&8375, 2&8376, 3&4 ...  
 5 1000&1001, 1000&1002 ... 1000&8376 ... 8374&8375, 8374&8376, 8375&8376) although, for reasons of space, these are not listed in full here.

Details as to how the molecules which make up the SEQ IDs 1-4056 can be produced and used can be found from the relevant international applications and these details need not be repeated here. Similar principles apply to SEQ IDs 4057-8376.

- 10 SEQ IDs 1-8376 in the compositions of the invention may be supplemented or substituted with molecules comprising sequences homologous (*ie.* having sequence identity) to SEQ IDs 1-8376. Depending on the particular sequence, the degree of identity is preferably greater than 50% (*eg.* 65%, 80%, 90%, or more), and include mutants and allelic variants. Sequence identity between the proteins is preferably determined by the Smith-Waterman homology search

algorithm as implemented in the MPSRCH program (Oxford Molecular), using an affine gap search with parameters *gap open penalty*=12 and *gap extension penalty*=1.

SEQ IDs 1-8376 in the compositions of the invention may be supplemented or substituted with molecules comprising fragments of SEQ IDs 1-8376. Such fragments should comprise at least *n* consecutive monomers from the molecules and, depending on the particular sequence, *n* is either (i) 7 or more for protein molecules (eg. 8, 10, 12, 14, 16, 18, 20 or more), preferably such that the fragment comprises an epitope from the sequence, or (ii) 10 or more for nucleic acid molecules (eg. 12, 14, 15, 18, 20, 25, 30, 35, 40 or more).

Where the composition includes a protein that exists in different nascent and mature forms, the mature form of the protein is preferably used. For example, the mature form of the NspA protein (SEQ IDs 4008-4033; WO96/29412; Figure 29) lacking the signal peptide may be used.

In the case of protein molecules, SEQ IDs 1-8376 in the compositions of the invention may be supplemented or substituted with an antibody that binds to the protein. This antibody may be monoclonal or polyclonal.

In the case of nucleic acid molecules, SEQ IDs 1-8376 in the compositions of the invention may be supplemented or substituted with nucleic acid which can hybridise to the *Neisseria* nucleic acid, preferably under "high stringency" conditions (eg. 65°C in a 0.1xSSC, 0.5% SDS solution).

It will be appreciated that any nucleic acid in the compositions can take various forms (eg. single stranded, double stranded, vectors, probes *etc.*). In addition, the term "nucleic acid" includes DNA and RNA, and also their analogues, such as those containing modified backbones, and also peptide nucleic acids (PNA) *etc.*

In certain embodiments, the composition comprises molecules from different *Neisseria* species, such as one or more *N.meningitidis* molecule and one or more *N.gonorrhoeae* molecule. In some embodiments, the composition may comprise molecules from different serogroups and/or strains of the same species, such as strains A and B of *N.meningitidis*. Further embodiments comprise mixtures of one or more *N.meningitidis* molecules from different strains and also one or more *N.gonorrhoeae* molecules.

Many proteins are relatively conserved between different species, serogroups and strains of *N.meningitidis* and *N.gonorrhoeae* (eg. SEQ IDs 52, 54, 58). PCT/IB00/00642 includes a more



detailed experimental analysis of conserved regions in these proteins. To ensure maximum cross-strain recognition and reactivity, regions of proteins that are conserved between different Neisserial species, serogroups and strains can be used in the compositions of the present invention. The invention therefore provides proteins which comprise stretches of amino acid sequence that are shared across the majority of *Neisseria*, particularly *N.meningitidis* and *N.gonorrhoeae*. Preferably, therefore, the composition comprises a protein comprising a fragment of a Neisserial protein (preferably a protein from SEQ IDs 1-8376, or more preferably SEQ IDs 1-4002), wherein said fragment consists of *n* consecutive conserved amino acids. Depending on the particular protein, *n* is 7 or more (eg. 8, 10, 12, 14, 16, 18, 20 or more). The fragment preferably comprises an antigenic or immunogenic region of the Neisserial protein. A "conserved" amino acid is one that is present in a particular Neisserial protein in at least *x*% of *Neisseria* (or, preferably, in at least *x*% of combined *N.meningitidis* and *N.gonorrhoeae* strains). The value of *x* may be 50% or more eg. 66%, 75%, 80%, 90%, 95% or even 100% (ie. the amino acid is found in the protein in question in all *Neisseria*). In order to determine whether an amino acid is "conserved" in a particular Neisserial protein, it is necessary to compare that amino acid residue in the sequences of the protein in question from a plurality of different *Neisseria* (a "reference population"). Suitable definitions of "reference populations" can be found in PCT/IB00/00642. Amino acid sequences of different *Neisseriae* can easily be compared using computers. This will typically involve the alignment of a number of sequences using an algorithm such as CLUSTAL [Thompson *et al.* (1994) *Nucleic Acids Res* 22:4673-4680; *Trends Biochem Sci* (1998) 23:403-405] or, preferably, PILEUP [part of the GCG Wisconsin package, preferably version 9.0]. Conserved amino acids are readily apparent in a multiple sequence alignment – at the amino acid position in question a majority of the aligned sequences will contain a particular amino acid. Conserved amino acids can be made more visually apparent by using a program such as BOXSHADE [available, for instance, at the NIH on-line], PRETTYBOX [GCG Wisconsin, version 10] or JALVIEW [available on-line at EBI].

Specific compositions according to the invention therefore include those comprising:

- two or more biological molecules selected from SEQ IDs 1-4002;
- one or more biological molecules selected from SEQ IDs 1-4002 combined with one or more biological molecules selected from SEQ IDs 4003-8376;
- one or more biological molecules selected from SEQ IDs 1-4002 combined with the NspA protein (as disclosed in WO96/29412; see also Figure 29 herein), preferably in mature form;

- one or more biological molecules selected from SEQ IDs 1-8376 (preferably SEQ IDs 1-4002) combined with transferrin binding protein A (TbpA) and/or B (TbpB), such as the TbpA and TbpB disclosed in WO00/25811 (or immunogenic fragments thereof).
- one or more fragments of proteins selected from SEQ IDs 1-4002, with the fragment preferably comprising a stretch of conserved amino acids:
- a combination of different proteins, wherein the combination as a whole includes one or more proteins that is recognised by each strain in a reference population, although each individual protein in the combination may not itself be recognised by each strain in the reference population *ie.* each member of a reference population recognises at least one protein in the combination.

The invention also provides the compositions of the invention for use as medicaments (*eg.* as immunogenic compositions or vaccines) or as diagnostic reagents. It also provides the use of the compositions in the manufacture of: (i) a medicament for treating or preventing infection due to Neisserial bacteria; (ii) a diagnostic reagent for detecting the presence of Neisserial bacteria or of antibodies raised against Neisserial bacteria; and/or (iii) a reagent which can raise antibodies against Neisserial bacteria.

The invention also provides a method of treating a patient, comprising administering to the patient a therapeutically effective amount of a composition according to the invention.

The invention further provides a process for producing a composition according to the invention, comprising the step of bringing one or more of SEQ IDs 1-8376 into combination with one or more other of SEQ IDs 1-8376.

#### BRIEF DESCRIPTION OF THE DRAWINGS

**Figure 1** shows SDS-PAGE results for the expression of ORFs 6, 7, 13, 65-1, 72, 73-1, 105-1, 137-1, 143-1 and 147-1. The left-hand lanes show molecular weight markers (set M1).

**Figure 2** shows (A) SDS-PAGE results for ORF9 (B) the position of the *N.meningitidis* immunoreactive band in a Western blot against a *N.meningitidis* outer membrane vesicle preparation (C) FACS analysis.

**Figure 3** shows SDS-PAGE results for the expression of ORFs 2-1, 5-1, 22-1, 132-1 and 4. The left-hand lanes show molecular weight markers (set M1).

Figures 4 to 28 show a hydrophilicity plot (upper), antigenic index (middle), and AMPHI regions (lower) for ORFs 2, 5, 6, 7, 9, 13a, 15, 22, 23, 27, 28, 32, 65, 72, 73, 76, 79, 89, 105, 106-1, 132, 137, 138, 143 and 147.

Figure 29 shows sequence variability of NspA from various strains of meningococcus B. These sequences may be used as alternatives to the NspA of WO 96/29412 (SEQ IDs 4008-4033).

Figure 30 shows the binding of polyclonal anti-rNspA by indirect fluorescence flow cytometry to encapsulated and non-encapsulated menB strains. Figure 31 shows similar data for encapsulated strains 8047, CU385 & M986 (31A) and non-encapsulated strains BZ232, MC58, NG3/88 & NGB165 (31B).

10 Figure 32 shows a model of NspA secondary structure.

Figure 33 shows FACS analysis of non-encapsulated strain M7 (37A) and ethanol-treated (to disrupt the capsule) strains 2996, N44776, MC58, 1000, BZ232, BZ133, NG6/88, BZ198, NG3/88, 297-0, BZ147 and BZ169 (37B) using a tetravalent mixture.

Figure 34 shows FACS analysis of M7 strain using a pentavalent mixture at 1:400 (34A), 1:200  
15 (34B) & 1:100 (34C) dilutions.

## EXAMPLES

### Example 1 – Expression and purification experiments

ORFs 6, 7, 13, 65-1, 72, 73-1, 105-1, 137-1, 143-1 and 147-1 disclosed in WO99/24578 were expressed in *E.coli* and purified, as set out in the following table:

ORF	His-fusion	GST-fusion	Purification	MW (kDa)
6		+	GST-fusion	23
7	+	+	GST-fusion	28
13		+	GST-fusion	10
65-1		+	GST-fusion	32
72	+		His-fusion	13.5
73-1		+	GST-fusion	13
105-1	+	+	His-fusion	32
137-1		+	GST-fusion	31
143-1	+	+	His-fusion	23.5
147-1	-	-	His-fusion	32

NOTE: ORF73-1 was expressed as a fragment (amino acids 41-161)

The protocols used to express these ten ORFs were essentially the same as those described in WO99/24578, using pGEN and pET vectors. Examples of the PCR primers used to amplify the ORFs are in the following table:

ORF	Primer	Sequence	Restriction sites
ORF65-1	Forward	CGCGGATCCCATATG-TTTATGAACAAATTTTCC	BamHI-NdeI XhoI
	Reverse	CCCGCTCGAG-TTTGCTTTTCGATAGAACGG	
ORF73-1	Forward	CGCGGATCCCATATG-GCCGGCGTGCTGATG	BamHI-NdeI XhoI
	Reverse	CCCGCTCGAG-TTCATCTTTTTCATGTTCCG	
ORF105-1	Forward	CGCGGATCCCATATG-CCGACCGTCCGTT	BamHI-NdeI XhoI
	Reverse	CCCGCTCGAG-TAAACGAATGCCGTCCAG	
ORF143-1	Forward	CGCGGATCCCATATG-GAATCAACACTTTTCAC	BamHI-NdeI XhoI
	Reverse	CCCGCTCGAG-CACGCGGTTGCTGTAAC	
ORF147-1	Forward	CCGGAATTCTACATATG-TTTCAGAAACATTTGCAG	EcoRI-NdeI XhoI
	Reverse	CCCGCTCGAG-TTTGTTTTTCCAAGACAGAG	

5 SDS-PAGE results for the ten expressed ORFs are shown in Figure 1.

The ORF7-His fusion was used to immunise mice. The sera were used in an ELISA assay, essentially as described in WO99/24578, and gave positive results.

The following proteins were also expressed and purified (results not shown):

ORF	His-fusion expression	GST-fusion expression	Expressed as a fragment	Fragment amino acid positions
ori1 (s)	-	-	-	43-1087
ori1 (β)	n.d.	-	-	1051-1457
ori35-1	-	-	-	-
ori41	n.d.	n.d.	-	25-619
ori46	-	-	-	25-433
ori61	n.d.	n.d.	-	1-575

orf83-1	-	-	-	15-313
orf100-1	n.d.	-	-	21-376
orf114-1	n.d.	-	-	1-1423
orf124-1	n.d.	n.d.	-	
orf131-1	n.d.	-	-	22-135

The following PCR primers were used to amplify these ORFs:

ORF	Primer	Sequence	Restriction sites
ORF1 (s)	Forward	CGCGGATCCGCTAGC-GGACACACTTATTTCCG	BamHI-NheI XhoI
	Reverse	CCCGCTCGAG-CAGCGCGTCAAGGCTT	
ORF1 (β)	Forward	CGCGGATCCGCTAGC-GAGTTCCGCCTGCATAA	BamHI-NheI XhoI
	Reverse	CCCGCTCGAG-CCAGCGGTAGCCTAATT	
ORF35-1	Forward	CGCGGATCCGCTAGC-AGGGGCGACGACGTG	BamHI-NheI XhoI
	Reverse	CCCGCTCGAG-AAACAGCCATTTGAGCGA	
ORF41	Forward	CGCGGATCCCATATG-TATTTGAAACAGCTCCAAG	BamHI-NdeI XhoI
	Reverse	CCCGCTCGAG-TTCTGGGTGAATGTTA	
ORF46	Forward	CGCGGATCCCATATG-TCAGATTTGGCAAACGATC	BamHI-NdeI XhoI
	Reverse	CCCGCTCGAG-CGTATCATATTTCAAGTGC	
ORF61	Forward	CGCGGATCCGCTAGC-ACGGTTTTGAAGCTTTCCG	BamHI-NheI XhoI
	Reverse	CCCGCTCGAG-AATGACGAGGTTGTCCG	
ORF83-1	Forward	CGCGGATCCCATATG-TGCGGCACACTGACCG	BamHI-NdeI XhoI
	Reverse	CCCGCTCGAG-GCCGCCTTTGCGGC	
ORF100-1	Forward	CGCGGATCCCATATG-TCGGGCATTTACACCGG	BamHI-NdeI XhoI
	Reverse	CCCGCTCGAG-TTCGTGAAAACCTTTGC	
ORF114-1	Forward	CGCGGATCCCATATG-AATAAAGGTTTACATCGCAT	BamHI-NdeI XhoI
	Reverse	CCCGCTCGAG-AATCGCTGCACCGGCT	
ORF124-1	Forward	CGCGGATCCCATATG-ACTGCCTTTTCGACA	BamHI-NdeI XhoI
	Reverse	CCCGCTCGAG-GCGTGAAGCGTCAGGA	

ORF131-1	Forward	CGCGGATCCCATATG-TGCCGGCTGGCGGG	BamHI-NdeI XhoI
	Reverse	CCCGCTCGAG-CCAGCGGACGCGTTC	

Each of these ORFs can be combined with one or more of SEQ IDs 1-8376.

#### Example 2 – ORF9 expression and purification

ORF9 disclosed in WO99/24578 was cloned in the pET vector and expressed in *E.coli*. The purified ORF-His fusion protein was analysed by SDS-PAGE, as shown in Figure 2A. Mice were immunised with the purified ORF9-His and sera were used for Western blot analysis (Figure 2B), FACS analysis (Figure 2C), and ELISA assay. The protocols used were essentially the same as those set out in WO99/24578.

The results confirm that ORF9 is a surface-exposed protein. ORF9 is suitable for combining with one or more other of SEQ IDs 1-8376.

#### 10 Example 3 – Further expression experiments

Further expression and purification experiments were carried out in *E.coli* for ORFs 2-1, 5-1, 22-1 and 132-1 disclosed in WO99/24578, as set out in the following table:

ORF	His-fusion	GST-fusion	Purification	MW (kDa)
2-1	-	+	GST-fusion	26
5-1	-	-	GST-fusion	33
22-1	-	-	His-fusion	49
132-1	-	-	GST-fusion	48

The protocols used to express these four ORFs were essentially the same as those described in WO99/24578, using pGEX and pET vectors. Examples of the PCR primers used to amplify the ORFs are in the following table:

ORF	Primer	Sequence	Restriction sites
ORF5-1	Forward	CGCGGATCCGCTAGC-GACGGCGCACAAACCGA	BamHI-NheI

ORF22-1	Reverse	CCCGCTCGAG-TGTTTGGCGGATGGGG	XhoI
	Forward	CGCGGATCCCATATG-ATTAAAATCAAAAAGGTC	BamHI-NdeI
ORF132-1	Reverse	CCCGCTCGAG-GCCTTCCTTCTCAATGG	XhoI
	Forward	CGCGGATCCCATATG-AAAGAAGCGGGGTTTGAA	BamHI-NdeI
	Reverse	CCCGCTCGAG-TCTCAAAGCTTCCAGCAG	XhoI

SDS-PAGE results for the four expressed ORFs are shown in Figure 3.

Each of these ORFs can be combined with one or more of SEQ IDs 1-8376.

#### Example 4 – ORF4 lipoprotein expression and purification

ORF4 is disclosed in WO99/24578 as containing a lipopeptide signal sequence (LPSS). The full  
5 length ORF was amplified using the following PCR primers:

orf4-L for CGCGGATCCCATATGAAAACCTTCTTCAAAACC

orf4-L rev CCCGCTCGAGTTATTTGGCTGCGCCTTC

The amplified DNA fragment was cloned into the vector pET21b+ for expression as a C-terminus His-tagged fusion. A log phase culture of *E. coli* containing pET21b-orf4-LPSS was  
10 induced with 1.0 mM IPTG for 3 h at 30°C, collected by centrifugation for 10 min at 8000g, and resuspended in PBS. The suspension was sonicated on ice and Triton X-114 added to a final concentration of 0.6% (v/v). The material was incubated on ice for 20 minutes then warmed to 37°C until phase separation occurred (indicated by a high degree of cloudiness). After centrifugation for 10 min at 10,000g at 20°C the upper aqueous phase was discarded, and  
15 the lower detergent phase collected without disrupting the bacterial pellet. To the detergent phase was added 13 volumes of 20 mM Histidine, 2 mM EDTA, 30 mM NaCl (pH 5.8). This was centrifuged for 10 min at 4°C and the supernatant combined batchwise at 4°C for 30 min, with Q Sepharose Fast Flow resin (Pharmacia). The mixture was centrifuged, the supernatant retained and the resin washed with 20mM Histidine, 2mM EDTA, 30 mM NaCl (pH 5.8).  
20 Triton X-100 0.3% (v/v) and eluted with 1M NaCl in the same buffer. The majority of Orf4 lipoprotein was found in the supernatant obtained after binding. Final purification was accomplished by chromatography on Hi-Trap™ Q (Pharmacia). The binding-supernatant was adjusted to pH 7.0 by the addition of 0.1M HCl and applied to a Hi-Trap™ Q column

equilibrated with 50mM Tris-HCl (pH 7.0), 2mM EDTA, 0.3% Triton X-100, 10mM NaCl. The column was washed with 5.0 ml of the equilibration buffer and a NaCl gradient from 10mM to 1M was applied. Two electrophoretically distinct forms of the protein eluted. One in the wash and the other in the NaCl gradient between 150mM and 300mM NaCl. The protein  
 5 obtained in the wash was used for immunization of mice. This form of the protein probably represents the fully processed, lipidated molecule.

The 31kDa purified lipoprotein can be seen in Figure 3. ORF4 is suitable for combining with one or more other of SEQ IDs 1-8376.

#### Example 5 – Computer prediction

10 Computer analysis of ORFs 2, 5, 6a, 7, 9, 13a, 15, 22, 23, 27, 28, 32, 65, 72, 73, 76, 79, 89, 105, 106-1, 132, 137, 138, 143 and 147 (as disclosed in WO99/24578) was performed. Figures 4 to 28 show, for each of these ORFs, a hydrophilicity plot (upper), an antigenic index plot (middle), and an AMPHI analysis (lower). The AMPHI program has been used to predict T-cell epitopes [Gao *et al.* (1989) *J. Immunol.* 143:3007; Roberts *et al.* (1996) *AIDS Res Hum Retrovir*  
 15 12:593; Quakyi *et al.* (1992) *Scand J Immunol* suppl.11:9) and is available in the Protean package of DNASTAR, Inc. (1228 South Park Street, Madison, Wisconsin 53715 USA).

Each of these ORFs can be combined with one or more other of SEQ IDs 1-8376.

#### Example 6 – Tetravalent mixture

A mixture of proteins 919 (WO99/57280), 225 (WO99/57280), ORF4 (WO99/24578, example  
 20 26) and ORF40 (WO99/36544, example 1) was produced and assessed by ELISA and FACS. The ELISA titres against 13 test strains were as follows:

Strain	M7 conF	2996	MC58	BZ133	BZ232	H44/76	1000
Titre	38176	7892	17216	41488	17945	83990	6575
Strain	BZ198	NG6/88	BZ169	BZ147	NG3/88	297-0	
Titre	3329	59275	-	-	12877	25640	

The FACS results are shown in Figure 33. It is evident that the tetravalent mixture gives excellent results, regardless of the particular menB strain used. In addition, antisera raised  
 25 against the mixture in strain 2996 is bactericidal at up to 1:2048 dilution.



**Example 7 – Pentavalent mixture**

A mixture of proteins ORF4-L (the lipidated protein – see example 4 above), ORF37 (WO99/24578, example 1), ORF40 (WO99/36544, example 1), 502 (WO99/57280, pages 687-690) and 8 (WO99/57280, pages 165-167) was produced. The ELISA titres against 13 test strains were as follows:

<b>Strain</b>	M7 conF	2996	MC58	BZ133	BZ232	H44/76	1000
<b>Titre</b>	-	-	25428	-	58300	>109350	>109350
<b>Strain</b>	BZ198	NG6/88	BZ169	BZ147	NG3/88	297-0	
<b>Titre</b>	10999	109532	42888	28324	104212	33996	

The FACS results are shown in Figure 34. It is evident that the pentavalent mixture gives excellent results, regardless of the particular menB strain used. In addition, antisera raised against the mixture in strain 2996 is bacteriostatic.

**10 Example 8 – trivalent mixture**

Proteins ORF1 (e.g. example 77 of WO99/24578; see also WO99/55873), '287' (e.g. Figure 21 of WO99/57280; also SEQ IDs 3103-3108 therein) and '919' (e.g. WO99/57280 Figure 23 and SEQ IDs 3069-3074 therein) were combined and adjuvanted with Al(OH)<sub>3</sub>. The proteins were from the 2996 strain of MenB.

15 This mixture was also combined with a MenC polysaccharide conjugate antigen [e.g. Costantino *et al.* (1992) *Vaccine* 10:691-698]. OMVs were used as controls.

The mixture was used in a bactericidal assay against the homologous strain and also heterologous MenB strains. Titres were as follows:

	<b>2996</b>	<b>BZ133</b>	<b>BZ232</b>	<b>1000</b>	<b>MC58</b>	<b>NGH38</b>
<b>Trivalent</b>	2048	2048	4	<4	64	4
<b>+ MenC</b>	2048	>32000	4	128	1024	128
<b>Control</b>	32765	4096	8192	16384	16384	8192

**Example 9 – Proteins 287, 919 and 953**

Proteins 287, 919 and 953 are disclosed in WO99/57280. These proteins from *N.meningitidis* serogroup B strain 2996 were expressed and tested in a bactericidal assay against strain 2996, alone and in combinations. OMVs from 2996 were used as a positive control.

Antigen	287	919	953	Control
Titre	8192	2048	128	65536
Combination	287+919	287+953	919+953	287+919+953
Titre	32000	8192	8192	8192

5

Figure 35 shows FACS data for the individual antigens and for the four combinations.

It is evident that the antigen mixtures are more effective than the antigens in isolation and, in particular, that combinations of 919+953 give surprisingly good results.

The individual antigens from 2996 and combinations were also tested against different serogroup A, B & C strains (*i.e.* heterologous challenge). Bactericidal titres were as follows:

10

Antigen	Serogroup B (MenB) strains					MenA	MenC
	2996	BZ133	BZ232	MC58	NGH38	F6124	C11
287	8192	>4096	256	1024	2048	1024	2048
919	2048	-	1024	-	-	-	-
953	128	-	-	-	-	-	-
287+919	32000	>4096	512	512	1024	512	>2048
287+953	8192	>4096	1024	512	2048	2048	>2048
919+953	8192	-	8192	-	-	-	-
Trivalent	8192	>2048	256	-	1024	>2048	>2048
Control	65536	-	8192	2048	-	2048	32768

It is apparent that the antigen mixtures are useful in conferring cross-strain activity.

In a second set of experiments, titres for the individual antigens were as follows:

Antigen	Serogroup B (MenB) strains					MenA	MenC
	2996	BZ133	BZ232	MC58	NGH38	F6124	C11
287	16000	2048	16	512	>2048	64	1024
919	16000	-	2048	-	-	-	-
953	2048	-	16	-	-	-	-

The three proteins used in this example were expressed and used in the following forms:

- (1) Protein 287 was expressed in *E. coli* as a GST fusion;
  - (2) Protein 919 was expressed in *E. coli* without its leader peptide, without its mature N-terminal cysteine, and without any fusion partners ("919-untag"); and
  - (3) Protein 953 was expressed using a histidine tag.
- 5 Three immunisations were administered with Freund's adjuvants – the first included CFA, and the final two included IFA.

#### Example 10 – further polyvalent combinations

Further combinations of antigens were tested in CD1 mice:

Antigens	Adjuvant	FACS	ELISA	Bactericidal activity
919-his+Orf4-his+ 225-his+Orf40-his	Freund	+++	+	8192
Orf4-L+Orf37-GST+Orf40-his+502-his+8-his	Freund	+++	+	Bacteriostatic
919-untag+791-his+792-his	Freund	+++	+	4096
919-untag+287-GST+953-his	Freund	+++	+	8192
919-untag+287-GST	Freund	+++	+	32000
287-GST+953-his	Freund	+++	+	8192
919-untag+953-his	Freund	+++	+	8192
919-untag+Orf1-his+287-GST	Al(OH) <sub>3</sub>	+++	+	2048
919-untag+Orf1-his-287-GST+MenC glycoconj.	Al(OH) <sub>3</sub>	+++	+	2048
Orf-46.1-his+ 287-GST	Al(OH) <sub>3</sub>	n.d.	+	128

\* : "his" indicates expression and immunisation with a histidine-tagged protein;

"ORF4-L" is the lipidated form of ORF4;

"GST" indicates expression and immunisation with a GST fusion protein;

"919-untag" is as defined in Example 9;

"MenC glycoconj" is the MenC glycoconjugate described in Example 8.

10

Further combinations of antigens were tested in guinea pigs:

Antigens	Adjuvant	FACS	ELISA	Bactericidal activity
919-his+287-GST+953-his+Orf46.1-his	Freund	+	+	4096
919-untag + 287-GST + 953-his	Freund	+	+	4096
287-GST + 953-his	Al(OH) <sub>3</sub>	n.d.	+	256

Evidently the combinations give excellent immunological results.

#### Example 11 – NspA combinations

NspA protein is disclosed in WO96/29412, and is represented herein as SEQ IDs 4008-4033. The academic literature disclosure of this protein [Martin *et al.* (1997) *J. Exp. Med.* 185 1173-1183] reported the protein to be highly conserved between *Neisseria* strains (99% cross-reactivity of anti-NspA antibodies with 250 meningococcal A, B & C strains) and also efficient protection against deadly challenge with live bacteria. There have also been reports that NspA adsorbed on alum elicits serum meningococcal bactericidal antibody responses in rabbits and monkeys [Martin *et al.* (1998) *Abstracts of 11th International pathogenic Neisseria conference*, page 198]. On the basis of these data, rNspA (recombinant NspA) is being developed as a vaccine for the prevention of meningococcal disease caused by all serogroups.

Despite sequence conservation, however, it has surprisingly been discovered that rNspA cell surface epitopes are detected on only 65% of the serogroup B strains tested below, and susceptibility to anti-NspA bactericidal activity is also less than that reported by Martin *et al.* These results contrast with Martin *et al.*, and suggest that a rNspA-based meningococcal B vaccines will need to be supplemented with additional antigens in order to be effective.

The *N.meningitidis* strains tested in this example were isolated from patients residing in different countries over a period of more than 30 years (see table on page 72). These strains were selected to be representative of widely divergent 'clonal' groups, as defined by multilocus isoenzyme typing [Seiler *et al.* (1996) *Mol. Microbiol.* 19:841-856] and/or multilocus sequence typing [Maiden *et al.* (1998) *PNAS USA* 95:3140-45]. Strain M7, which is derived from strain NMB, contains a transposon insertion that blocks capsular polysaccharide biosynthesis [Stephens *et al.* (1991) *Infect. Immun.* 59:4097-4102], but all the other strains are encapsulated.

Based on the nucleotide sequence in Martin *et al.* (1997), PCR primers were designed and the NspA gene from strain 8047 was amplified. The sequence, including the promoter region, was cloned into pSK+ plasmid (rNspA). A plasmid pTrc.NspA.1 encoding a protein in which a portion of the signal sequence has been replaced with a poly-histidine tag was also used. Both plasmids were expressed in *E.coli* strain BL21(DE3) and the proteins were purified. In *E.coli*, rNspA is secreted, rather than being associated with the outer membrane. The protein was partially purified from the culture medium by precipitation with 55% w/v ammonium sulphate, and had an apparent MW of 18.6kDa, confirmed by Western Blot.

The two forms of NspA (rNspA and denature His-tag NspA) were injected into 6-week old female CD-1 mice to raise antisera. The ability of these to bind to the surface of *N.meningitidis* strain B was determined using flow cytometric detection of indirect fluorescence assay [Granoff *et al.* (1998) *J.Immunol.* 160:5028-36]. The results for strains NMB and M7 (an acapsulated mutant of NMB) are shown in Figure 30. As expected, anti-group B polysaccharide mAb SEAM-3 [Granoff *et al.*] only binds to the encapsulated strain, whereas the positive anti-P1.2 (PorA) control mAb binds to both strains. The antisera raised against rNspA is able to bind both strains. Antisera against the His-tag NspA gave negative results, however. These antisera were also negative for strains 8047, CU385 and M986 (Figure 31A), but by Western Blot these antisera gave positive results.

These data suggest that antibodies prepared using His-tag NspA recognise epitopes that are present in denatured NspA, but not native NspA as found on the cell-surface *in vivo*. In contrast, antibodies prepared against rNspA seem to recognise conformational NspA epitopes.

The flow cytometric assay was applied to the strains shown in the table on page 72. Figure 31A shows that murine antibodies raised against rNspA bind to the surface of strain 8047 (the strain from which the *nspA* gene was cloned) and strain CU385, but not to M986. Figure 31B shows similar negative results for strains BZ232, MC58, NG3/88 and NGP165. In all of these negative cases, however, the anticapsular mAb control was positive.

The table on page 72 summarises the flow cytometry results. Although NspA is reported to be accessible at the surface of all intact *N.meningitidis* strains tested [Martin *et al.* (1997) *J. Exp. Med* 185 1173-1183; Plante *et al.* (1999) *Infect. Immun.* 67:2855-61], only 11 of the 17 test strains (65%) reacted with the anti-rNspA sera. There was no apparent relationship between cell-surface expression in a given strain and classification (by serotype, subtype, or electrophoretic type), or with year or country of isolation.

In an attempt to explain the differences in reactivity with the anti-rNspA sera, the *nspA* genes from five of the six negative strains (BX232, NG3/88, NGP165, M136 & M986) and from three of the positive strains (8047, CU385 & NG6/88) were sequenced. The sequence for the sixth negative strain (MC58) was already available from the complete genome sequence.

The *nspA* sequences for all ten strains were highly conserved, varying at most by 5 nucleotides from the prototype sequence of Martin *et al.* The most variant protein had only 3 amino acid differences (see Figure 29). With one exception, all of the amino acid variants involved the

same respective residues in discrete segments of the protein. These include the signal peptide, which is not present in the mature protein, and two short segments in the 50 C-terminal residues. These differences do not explain the antisera results, as there are examples of identical variant sequences in strains that were positive and those that were negative (compare M136 & 8047; NGP165 & NG6/88; MC58 & CU385).

As neither lack of the gene nor polymorphism explained the antiserum results, the amount of NspA protein in the outer membranes of five strains (8047, CU385 & NG6/88 – all positive for anti-rNspA; M986 & M136 – both negative) were tested. Bacterial cell pellets were extracted with lauryl sarcosinate, and the insoluble outer membrane fractions were analysed. An 18.6kDa band was seen for all five strains, and this was cross-reactive with anti-His-tag-NspA by Western Blot. Thus strain differences in *nspA* expression also failed to explain the results.

The ability of anti-rNspA to bind to the bacterial cell surface could be influenced by the amount of polysaccharide capsule present. The quantity of capsular polysaccharide produced by the 17 test strains was therefore assessed by inhibition ELISA.

Extracts of capsular polysaccharide were prepared based on a method described by Corn *et al.* [*J. Infect. Dis.* (1993) 167:356-64]. Individual bacterial clones were grown to an OD<sub>620</sub> 0.5-0.7 in 7 mL of Mueller-Hinton broth. Bacteria were collected by centrifugation at 5000g for 15 min, washed in 0.6mL of 10 mM Hepes, pH 8.0, and then resuspended in 0.6 mL of the same buffer containing 10 mM EDTA and incubated at 37°C for 1 hr. The cells were pelleted at 10,000g for 1 minute and the relative amount of meningococcal B polysaccharide antigen released into the supernatant was determined by an inhibition ELISA, performed as described by Azmi *et al.* [*Infect. Immun.* (1995) 63:1906-13]. The solid phase antigen in the ELISA was meningococcal B polysaccharide-ADH-biotin absorbed to avidin-coated microtiter plates [Granoff *et al.*]. The meningococcal B polysaccharide-reactive human paraprotein LIP [Azmi *et al.*] was used as the primary antibody (0.2 µg/ml). In the absence of inhibitor, this concentration of antibody was sufficient to given an OD of ~0.7 to 1.0 after 30 minutes incubation with substrate [Azmi *et al.*]. The titre of polysaccharide released into the supernatant was measured by determining the dilution of supernatant that resulted in 50% inhibition of antibody binding. Controls in this assay included an EDTA extract prepared from the strain M7, which does not produce any capsular polysaccharide, and purified meningococcal B polysaccharide. To ensure that all of the capsular polysaccharide was released by the EDTA treatment, the same inhibition ELISA was performed using the cell pellet resuspended in the same buffer and volume as the capsule

extract. The observable inhibitory activity from the cell pellet was between 0 and 10% of the activity observed in the capsule extracts with the latter, higher percentage coming from cell pellets of strains that produce the largest amounts of capsule.

The results for each strain are shown in the table on page 72. On average, the six negative anti-rNspA strains produced three-fold more capsular polysaccharide than the eleven positive strains (respective reciprocal geometric mean dilutions of 676 vs. 224,  $p < 0.05$ ). This may explain the results obtained with the antiserum – conceivably, the presence of larger amounts of capsule could interfere with the ability of the anti-rNspA antibody to bind to NspA epitopes which, in strains with lower amounts of capsule, are accessible.

10 The complement-dependent bactericidal activity of the anti-rNspA antisera were tested using an assay similar to that described by Mandrell *et al.* [*J. Infect. Dis.* (1995) 172:1279-89]. The complement source was human serum from a healthy adult with no detectable anti-capsular antibody to group B polysaccharide and no intrinsic bactericidal activity against the test strain. Serum bactericidal titres were defined as the serum dilution resulting in a 50% decrease in  
15 CFU/ml after 60 minutes incubation of bacteria in the reaction mixture, compared to the control CFU/ml at time zero.

Typically, bacteria incubated with a negative control antibody showed a 150-200% increase in CFU/ml during the 60 minutes of incubation. The positive control antibody [anti-capsular IgG2a mAb SEAM 12, Granoff *et al.*] showed complement-mediated bactericidal activity  
20 against all 17 strains. In contrast, the six strains that were negative for anti-rNspA antisera binding by flow assay were resistant, showing no bactericidal or bacteriostatic effects. Ten of the other eleven positive strains were either killed by complement and the antisera (SWZ107, J351, CU385, NG6/88, BZ198, H44/76, NMB & 8047) or were inhibited (H355 & S3446); strain 1000, however, was not affected.

25 The ability of the anti-rNspA antisera to confer passive protection against meningococcal B bacteremia was tested in infant rats using a method adapted from Saukkonen [*J. Infect. Dis.* (1988) 158:209-212]. Briefly, 6-7 day old rats were randomly distributed to nursing mothers. Groups of 5-6 animals were challenged IP with 100µl of approximately 5000 CFU of *N.meningitidis* group B bacteria. One strain negative for NspA surface epitopes (M986) and one  
30 positive strain (8047) were tested, each of which having been passaged three times in infant rats. Immediately before administration, the bacterial suspension was mixed with different dilutions of test or control antibody (positive control: anticapsular mAb; negative control:

anti-*E.coli*). 18 hours after challenge, blood specimens were obtained from the heart. Aliquots were plated onto chocolate agar, and CFU/ml was determined after overnight incubation at 37°C in 5% CO<sub>2</sub>.

The protective activities of the various co-administered antibodies were as follows:

Antibody treatment	Dose per rat or serum dilution	Strain	Blood culture		
			Positive/ total	CFU/ml (mean $\times 10^3$ )	CFU/ml (% of control)
Anticapsular mAb	2µg	M986	0/6	<1	<1
Anti-rNspA	1:5	M986	6/6	44 <sup>a</sup>	45
Anti-rNspA	1:25	M986	6/6	93 <sup>a</sup>	95
Anti- <i>E.coli</i> control	1:5	M986	6/6	98 <sup>a</sup>	-
Anticapsular mAb	2µg	8047	0/5	<1	<1
Anti-rNspA	1:5	8047	1/6	0.2 <sup>b</sup>	2
Anti-rNspA	1:25	8047	1/5	0.4 <sup>b</sup>	4
Anti- <i>E.coli</i> control	1:5	8047	6/6	10 <sup>b</sup>	-

5 <sup>a</sup>  $p > 0.5$ , compared to geometric mean CFU/ml of control rats

<sup>b</sup>  $p < 0.001$ , compared to geometric mean CFU/ml of control rats

As can be seen, a dose of 2µg per rat of the positive anticapsular control was protective against both strains. A 1:5 or 1:25 dilution of anti-rNspA antiserum protected against bacteremia caused by strain 8047. Neither dilution was effective in preventing M986 bacteremia, however.

- 10 Despite the positive conclusions of Martin *et al.*, therefore, NspA does not seem to be effective in preventing meningococcal B infection. Approximately one third of strains have decreased cell-surface expression of NspA epitopes when grown *in vitro*, are resistant to anti-NspA induced complement-mediated bacteriolysis, and are resistant to passive antiserum immunisation. These strains produce large amounts of capsular polysaccharide, and would thus
- 15 be expected to have the greatest virulence. The ability of a vaccine containing only NspA to confer broad protective immunity against meningococcal B thus has to be doubted.

Compositions comprising NspA [SEQ IDs 4008-4033; Figure 29] therefore advantageously comprise further antigens. A preferred aspect of the invention is thus a combination of NspA protein with one or more further Neisserial antigens.



### Example 12 – NspA fragments

A model of the secondary structure of NspA is shown in Figure 32, containing eight transmembrane  $\beta$ -strands and 4 surface-exposed connecting loops. This fits the pattern of alternating hydrophobic and hydrophilic amino acids in NspA, which is characteristic of many  $\beta$ -barrel porins [Weiss *et al.* (1990) *FEBS Letts* 267:268-272]

The grey shaded areas in the model indicate segments that are >40% identical and >70% similar to encoded amino acid sequences of opacity proteins (Opa) from *N.meningitidis*, *N. gonorrhoeae*, *N. flavius*, *N. sicca*, and *H. influenzae* identified in a BLAST search of the non-redundant GenBank CDS. The alternating sequences are predicted amphiphilic  $\beta$ -strands; vertical segments correspond to transmembrane segments; the top of the figure corresponds to surface exposed segments, labelled as loops 1 to 4.

According to Martin *et al.*, the only significant homology between the deduced amino acid sequence of NspA and those of other proteins are weak homologies with the Neisseria opacity protein (Opa) family in two small segments (~20 amino acids) near the C-terminal end of the protein. However, separate comparisons of the N- and C-termini of NspA with GenBank reveals a high degree of homology (>40 % identity and >70% similarity) between NspA and Opa proteins from *N.meningitidis*, *N. gonorrhoeae*, *N. flavius*, *N. sicca*, and *H. influenzae*. The Opa proteins are thought to be integral membrane proteins that have eight transmembrane segments and a  $\beta$ -barrel topology in the membrane similar to that of porin [Merker *et al.* (1997) *Mol. Microbiol.* 23:281-293]. The presence of NspA in detergent-insoluble membrane preparations indicate that NspA is located in the outer membrane, which would be consistent with the Opa-like membrane topology shown in the model. In addition, the segments of NspA that are most homologous to those of the Opa proteins are the putative transmembrane segments indicated in the shaded areas of Figure 32.

The opacity proteins of Neisseria can, under certain circumstances, elicit protective antibody. However, problems with limited antibody accessibility of the opacity proteins in encapsulated bacteria, variability of amino acid sequences in exposed loop segments, and phase variation of protein expression during clinical infection, have limited the ability of Opa to elicit protective antibody consistently [Malorny *et al.* (1998) *J. Infect. Dis.* 172:1279-89]. In contrast, there appears to be little or no sequence variation in the surface exposed loops of NspA in Figure 32. However, it was recently reported that a panel of anti-*N.meningitidis* NspA monoclonal antibodies that reacted with all meningococcal strains tested reacted with only a limited number

of *N.gonorrhoeae* strains, even though the respective amino acid sequences in the two species are 92% identical. When the respective NspA sequences of the meningococcal and gonococcal strains are compared (Figure 29), all of the respective amino acid differences result in changes in hydrophobicity or charge, and are located in the putative surface exposed connecting loops  
5 (Figure 32). This finding suggests that the connecting loops in NspA, which are highly conserved in *N.meningitidis*, may be important epitopes for antibodies that bind to native NspA. These segments of the molecule, therefore, would appear to be of greatest interest with respect to interacting with protective antibody. However, the putative surface loops of NspA are relatively small (10-14 amino acids) compared to, for example, the highly immunogenic  
10 external loops of PorA and Opc (24 to 45 amino acids). The shorter length of the loops may limit the accessibility of NspA surface epitopes for binding interactions with serum antibody, especially in the presence of abundant capsular polysaccharide.

Accordingly, the invention provides the fragments of NspA that are exposed on the cell-surface in Figure 32, namely SSSLGSAKG, NYKAPSTDFKLY, NRASVDLGGSDSFSQT, and  
15 NYIGKVNTVKNVRSG, and also provides corresponding fragments from allelic variants of NspA. In addition, the invention provides sub-sequences of these fragments, comprising 7 or more contiguous amino acids from the fragments. The invention further provides proteins comprising these fragments. Nucleic acid encoding these fragments and proteins is also provided.

These NspA fragments, proteins comprising the fragments, and nucleic acid, may be used in the  
20 compositions of the invention, in particular as substitutes for full-length NspA. In a further aspect, these fragments, proteins and nucleic acids may be used as products in isolation, that is to say they need not exclusively be used in combination with other biological molecules.

It will be appreciated that the invention has been described by means of example only, and that  
25 modifications may be made whilst remaining within the spirit and scope of the invention.

Reactivity of anti-rNspA polyclonal antisera with native NspA exposed on the surface of live, encapsulated, *Neisseria meningitidis* B bacteria in relation to susceptibility to bacteriolysis and capsular production.

Strain	Country	Year	Serologic Classification	Meningococcal B Strains		
				ET Complex	NspA Cell Surface Reactivity <sup>1</sup>	Anti-rNspA Bactericidal Activity <sup>2</sup> (1/titer)
SWZ107 <sup>a</sup>	Switzerland	1980	4:P1.2	104	Positive	≥64
NG6/88 <sup>a</sup>	Norway	1988	NT:P1.1	173	Positive	4
CU385 <sup>b</sup>	Cuba	1980	4:P1.15	5	Positive	4
IHS341	Finland	1985	15:P1.7.16	ND	Positive	16
BZ198	Netherlands	1986	NT:P-	154	Positive	≥64
NMB	US	1968	2b:P1.2,5	ND	Positive	16
8047	US	1978	2b:P1.2	ND	Positive	16
H44/76	Norway	1976	15:P1.7.16	5	Positive	24
1000 <sup>c</sup>	USSR	1989	NT:P1.5	61	Positive	<4
S3446 <sup>b</sup>	US	1972	14:P1.23.14	11 (A1 cluster)	Positive	<4 (static=16)
H355 <sup>b</sup>	Norway	1973	15:P1.15	11 cluster	Positive	<4 (static=4)
BZ232 <sup>a</sup>	Netherlands	1964	NT:P1.2	76	Negative	<4
NG3/88 <sup>a</sup>	Norway	1988	8:P1.1	A4 cluster	Negative	<4
MC58	UK	1985	15:P1.7.16b	5	Negative	<4
M136 <sup>b</sup>	US	1968	11:P1.15	D1 cluster	Negative	<4
M986 <sup>b</sup>	US	1963	2a:P1.5.2	B2 cluster	Negative	<4
NGP165	Norway	1974	NT:P1.2	37	Negative	<4
						28±4
						115±23
						116±1
						176±61
						362±1
						244±20
						1125±50
						99±16
						287±12
						585±151
						656±141
						1493±18
						498±105
						627±121
						1056±81
						1442±206
						138±6

<sup>a</sup> Denotes strains that have been characterized further by multilocus sequence typing [Maiden, 1998].

<sup>b</sup> Denotes strains obtained from the Frasch collection, US FDA. 8047 was obtained from W. Zollinger, Walter Reed Army Institute of Research, Washington, D.C. MC58 is the strain selected by TIGR for genomic sequencing. J351 was obtained from M. Sarvas, National Public Health Institute, Helsinki, Finland. The remaining strains are from the collection described by Seiler *et al.* [Seiler, 1996]. ET data are from Caughnatt *et al.* *J. Infect. Dis.* (1990) 162:867-874], and Seiler *et al.*

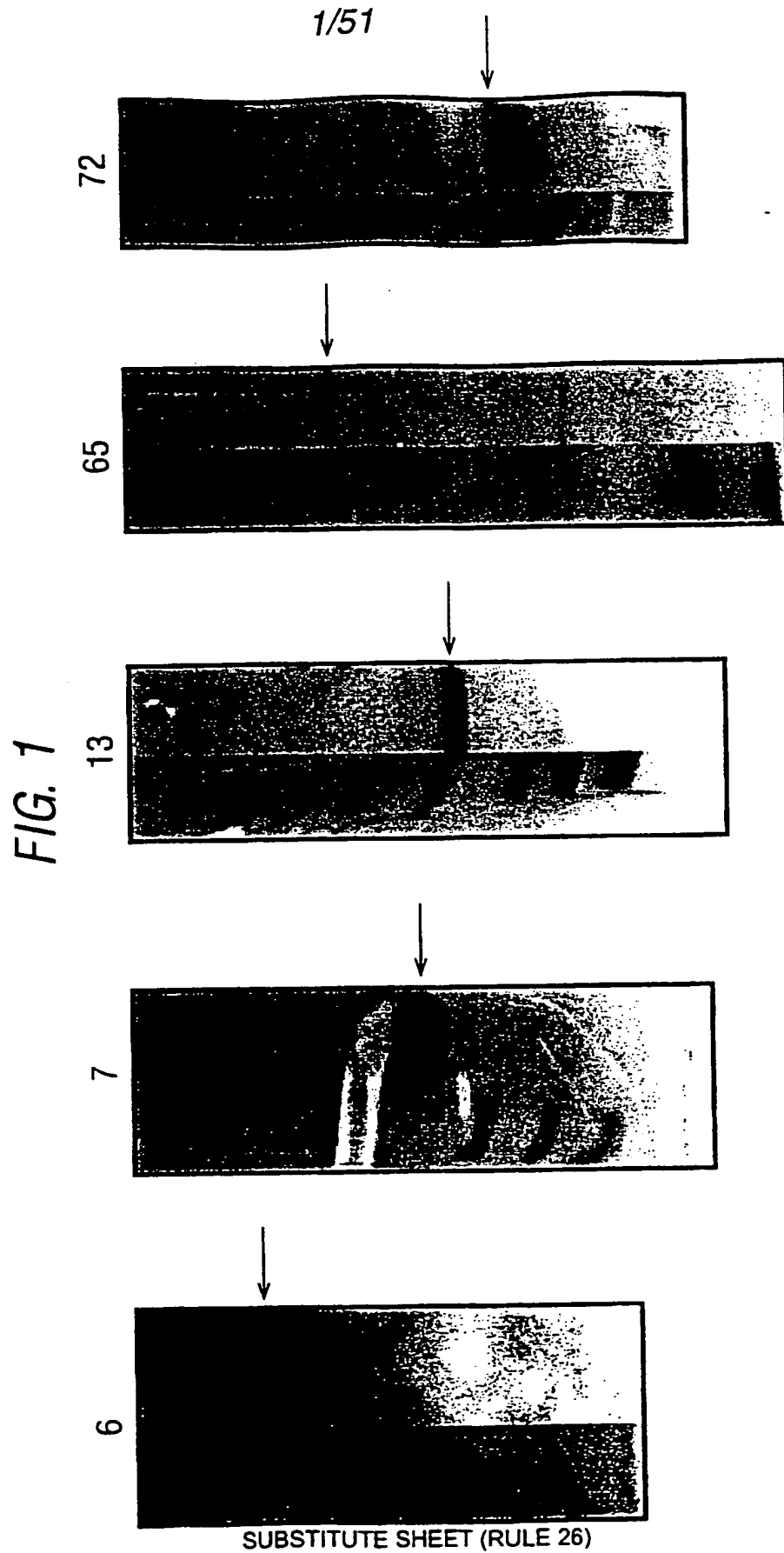
<sup>c</sup> By indirect fluorescence flow cytometry with anti-rNspA antisera.

<sup>d</sup> Dilution of anti-rNspA antisera that when incubated for 60 min. with bacterial cells and 20% human complement yielded ≥50% decrease in CFU/ml, compared to that at time 0. "Static" refers to strains that were inhibited but not killed in the assay (≥50% but <100 % survival at 60 mins).

<sup>e</sup> Titre defined as dilution of capsule extract giving 50% inhibition of antibody binding to meningococcal B polysaccharide antigen in an ELISA.

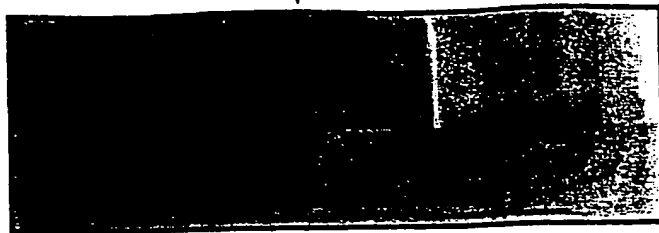
**CLAIMS**

1. A composition comprising a first biological molecule from a *Neisseria* bacterium and a second biological molecule from a *Neisseria* bacterium.
2. The composition of claim 1, wherein the first biological molecule is selected from the group consisting of SEQ IDs 1-8376.
3. The composition of claim 2, wherein the first biological molecule is selected from the group consisting of SEQ IDs 1-4002.
4. The composition of any preceding claim, wherein the second biological molecule is selected from the group consisting of SEQ IDs 1-8376.
5. The composition of claim 4, wherein the second biological molecule is selected from the group consisting of SEQ IDs 1-4002.
6. The composition of any one of claims 1 to 4, comprising two or more biological molecules selected from SEQ IDs 1-4002.
7. The composition of any one of claims 1 to 4, comprising one or more biological molecules selected from SEQ IDs 1-4002 combined with one or more biological molecules selected from SEQ IDs 4003-8376.
8. The composition of any one of claims 1 to 4, comprising one or more biological molecules selected from SEQ IDs 1-4002 & 4057-8376 combined with the NspA protein disclosed in WO96/29412, preferably in mature form.
9. The composition of any one of claims 1 to 4, comprising one or more biological molecules selected from SEQ IDs 1-8376 combined with 953 protein.
10. The composition of any preceding claim for use as a medicament



2/51

147

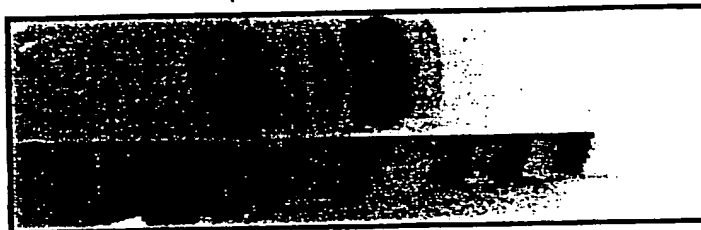


143

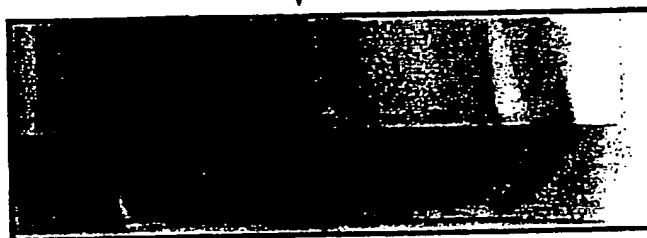


FIG. 1 (CONTD.)

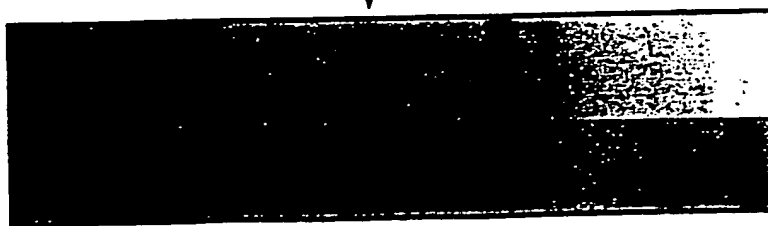
137



105



73



SUBSTITUTE SHEET (RULE 26)

3/51

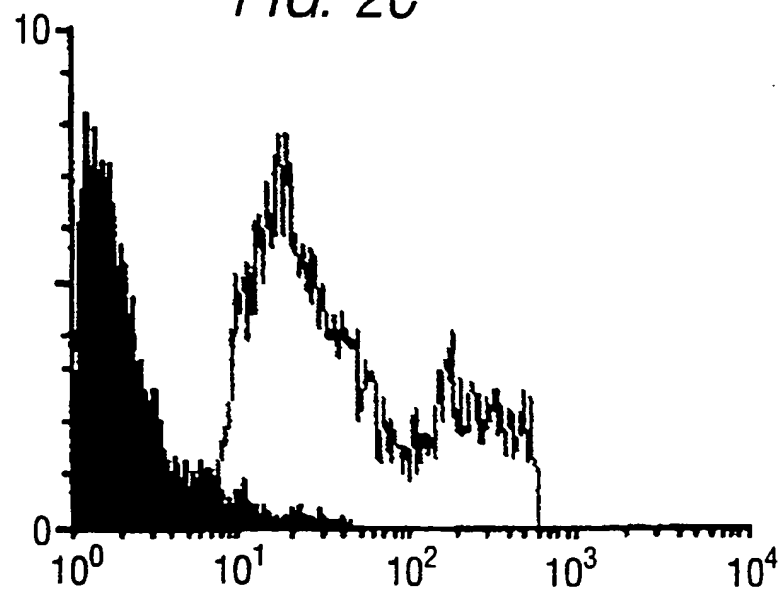
FIG. 2A



FIG. 2B



FIG. 2C



SUBSTITUTE SHEET (RULE 26)

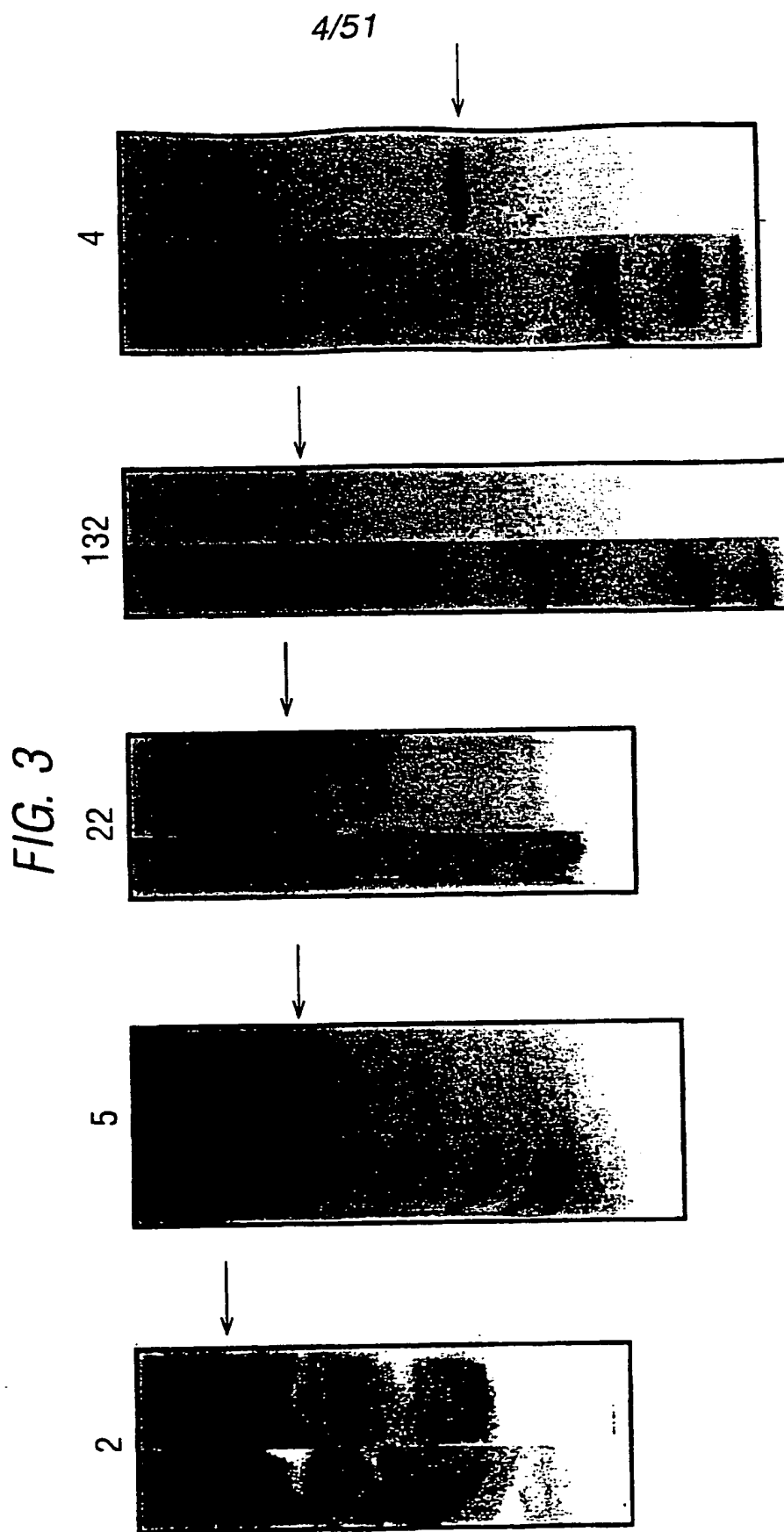
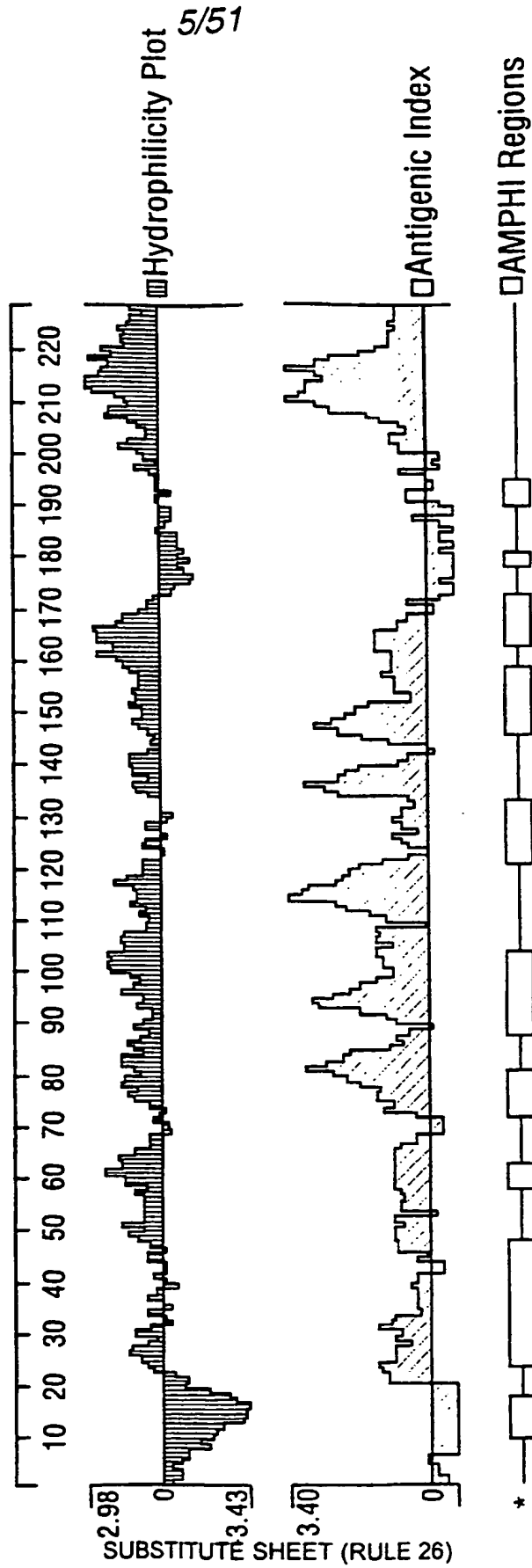


FIG. 3

SUBSTITUTE SHEET (RULE 26)

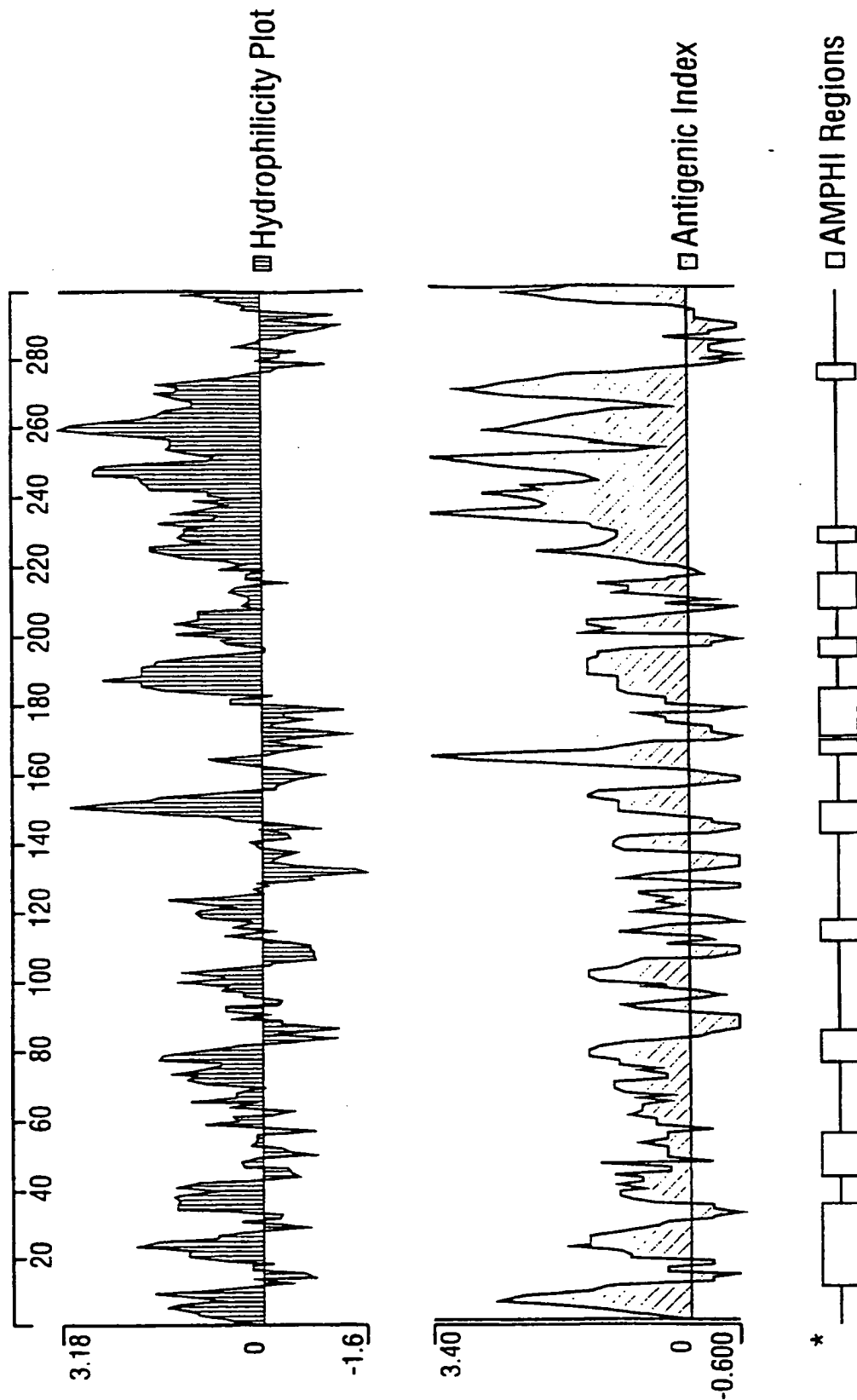


FIG. 4  
ORF2



6/51

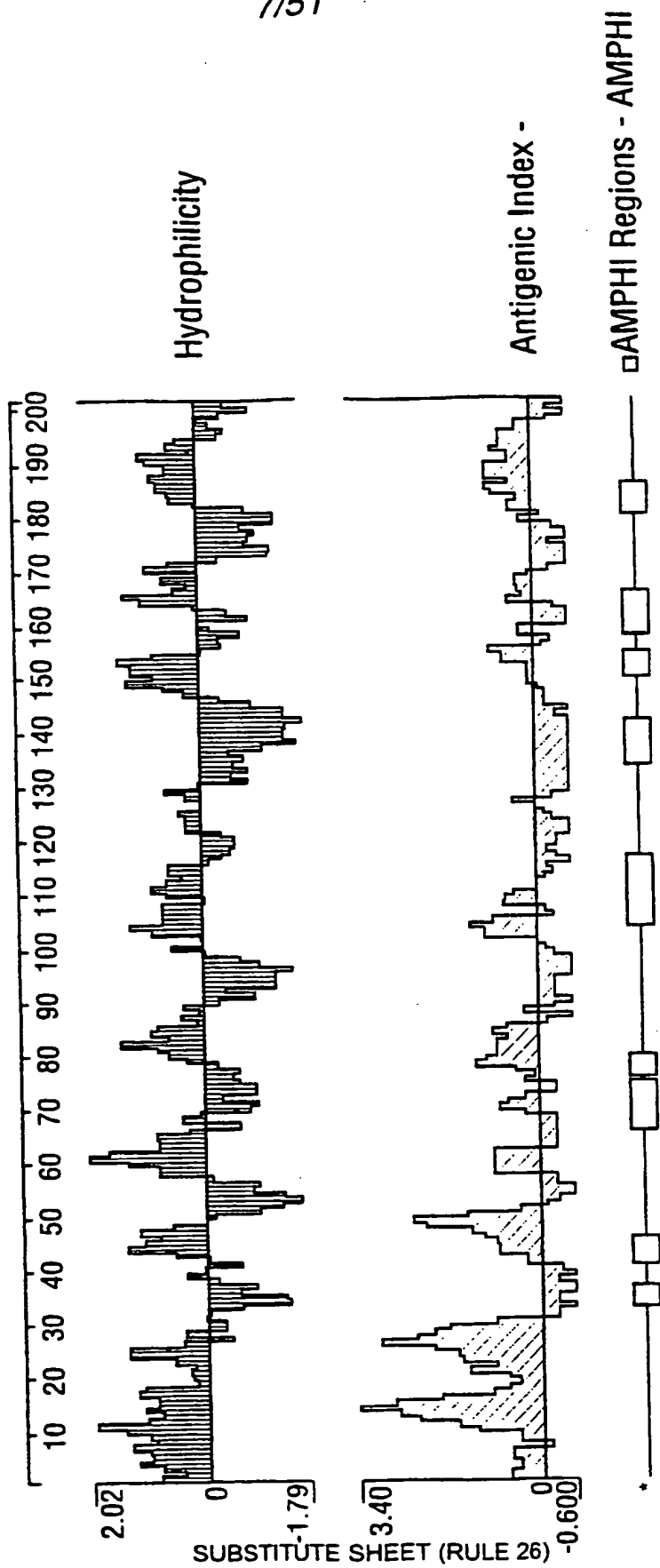
FIG. 5  
ORF5



SUBSTITUTE SHEET (RULE 26)

7/51

FIG. 6  
ORF6a



8/51

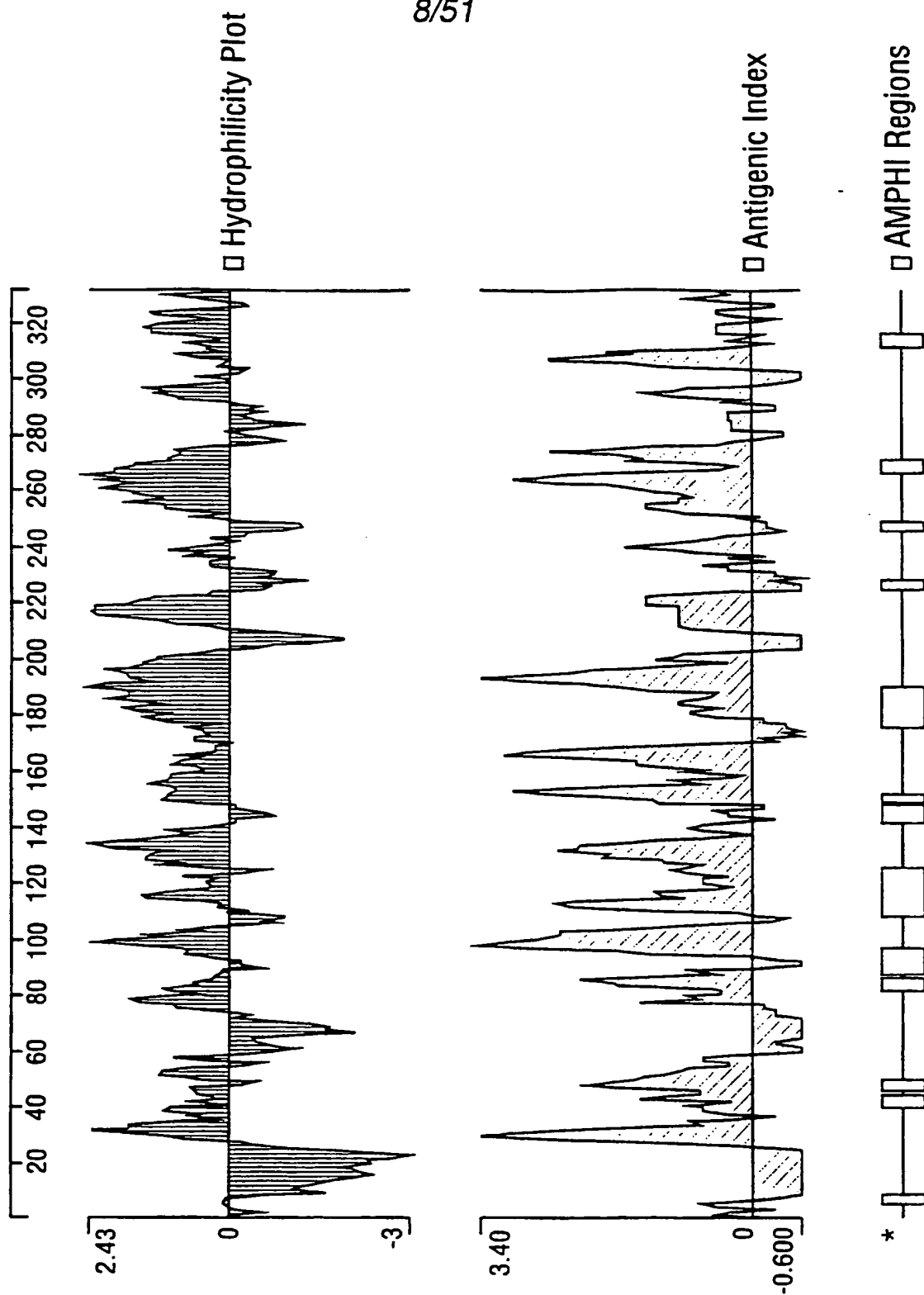
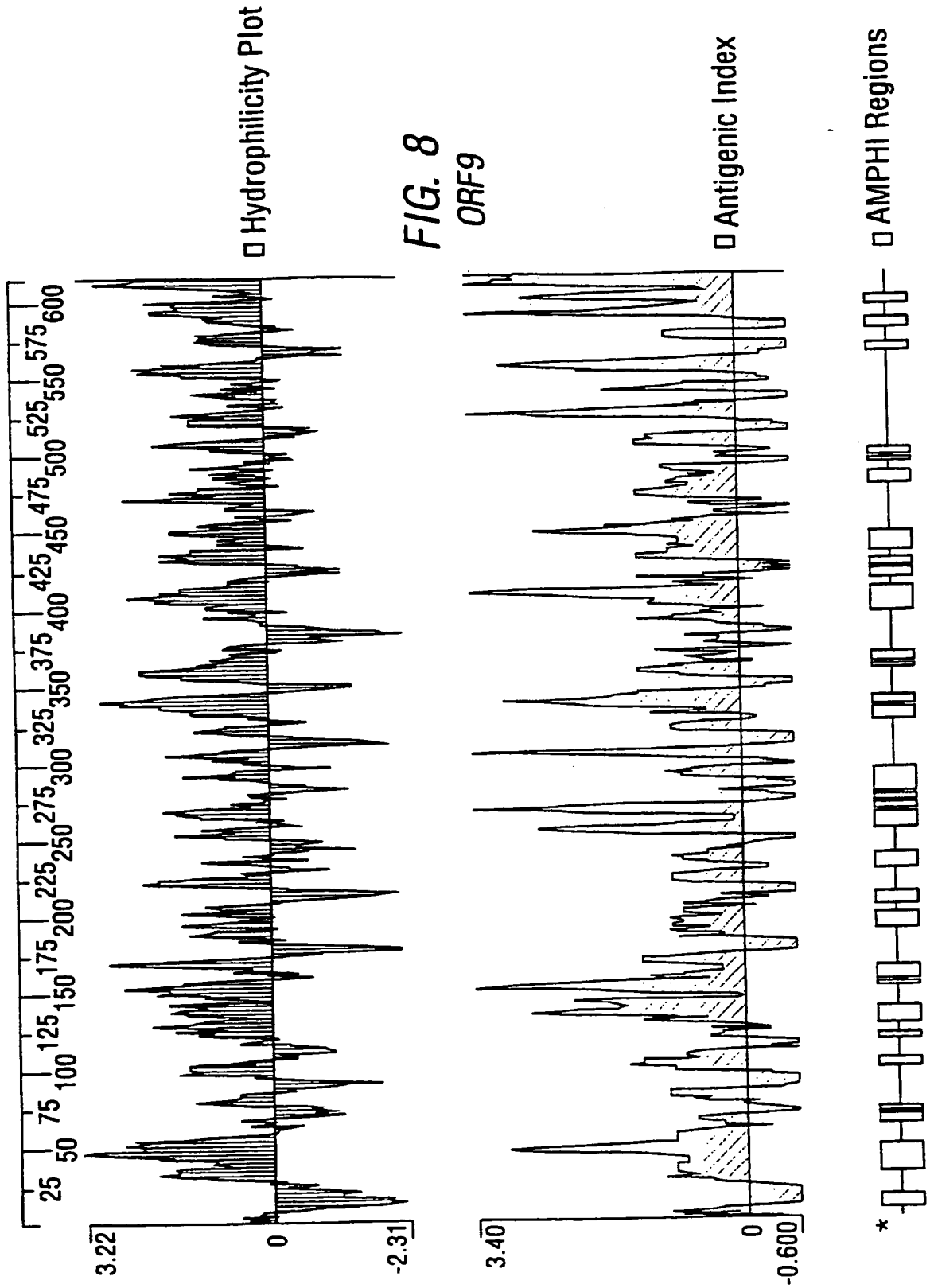


FIG. 7  
ORF7

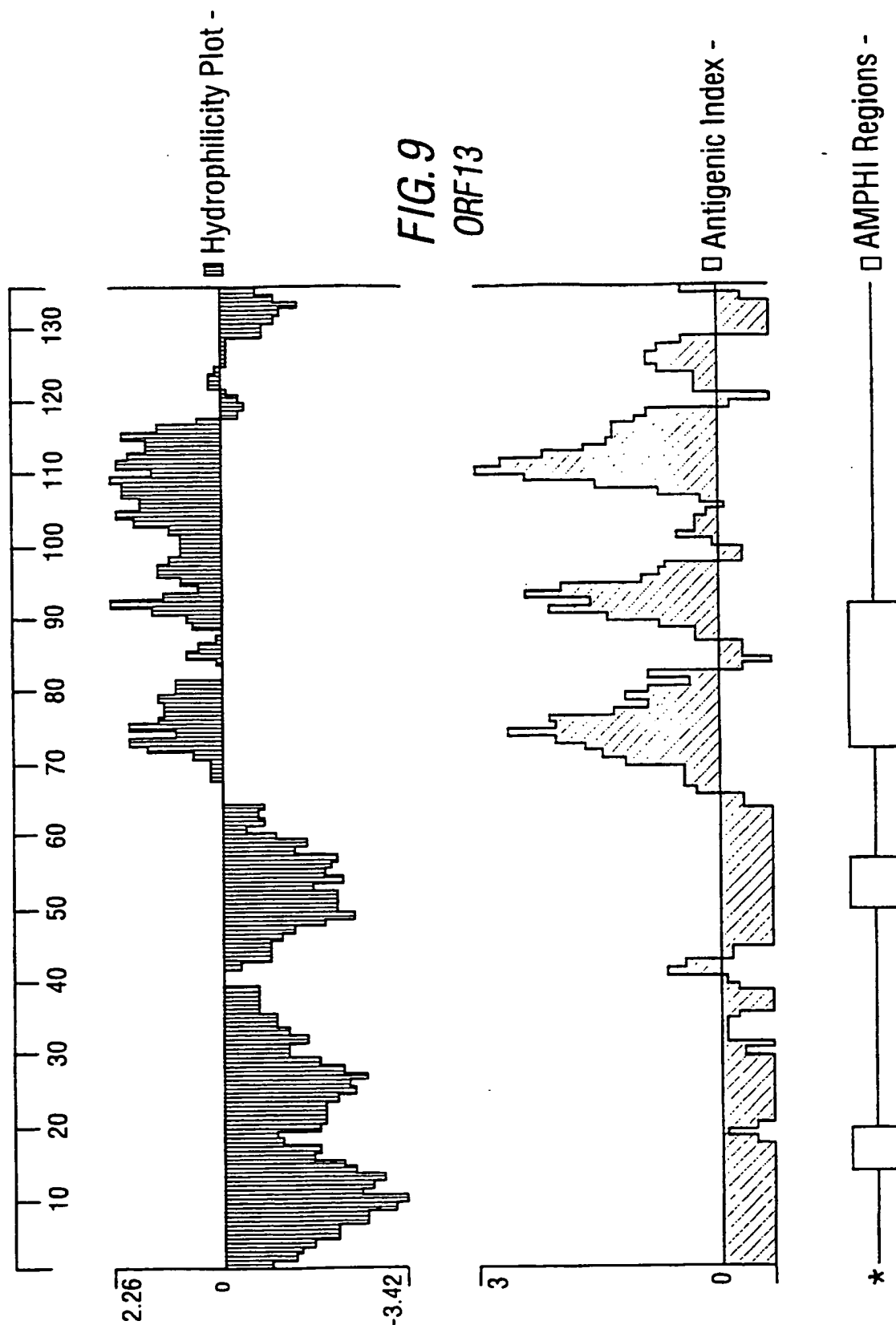
SUBSTITUTE SHEET (RULE 26)

9/51



SUBSTITUTE SHEET (RULE 26)

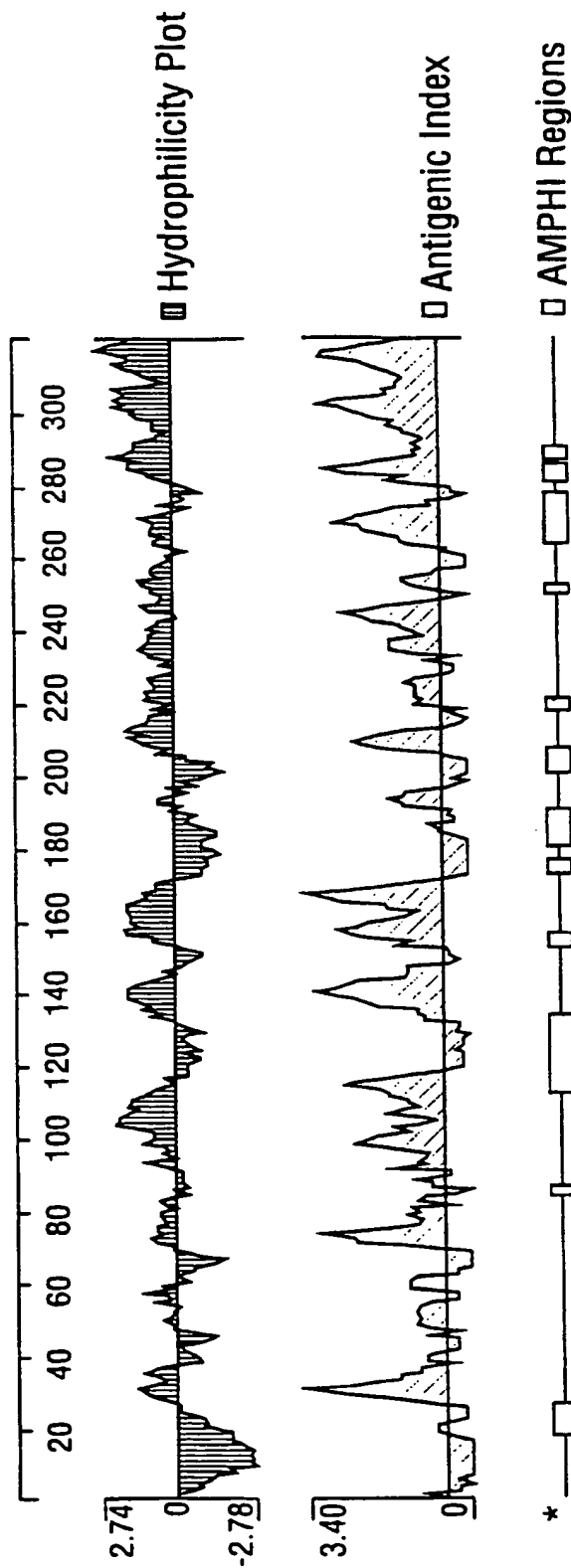
10/51



SUBSTITUTE SHEET (RULE 26)

11/51

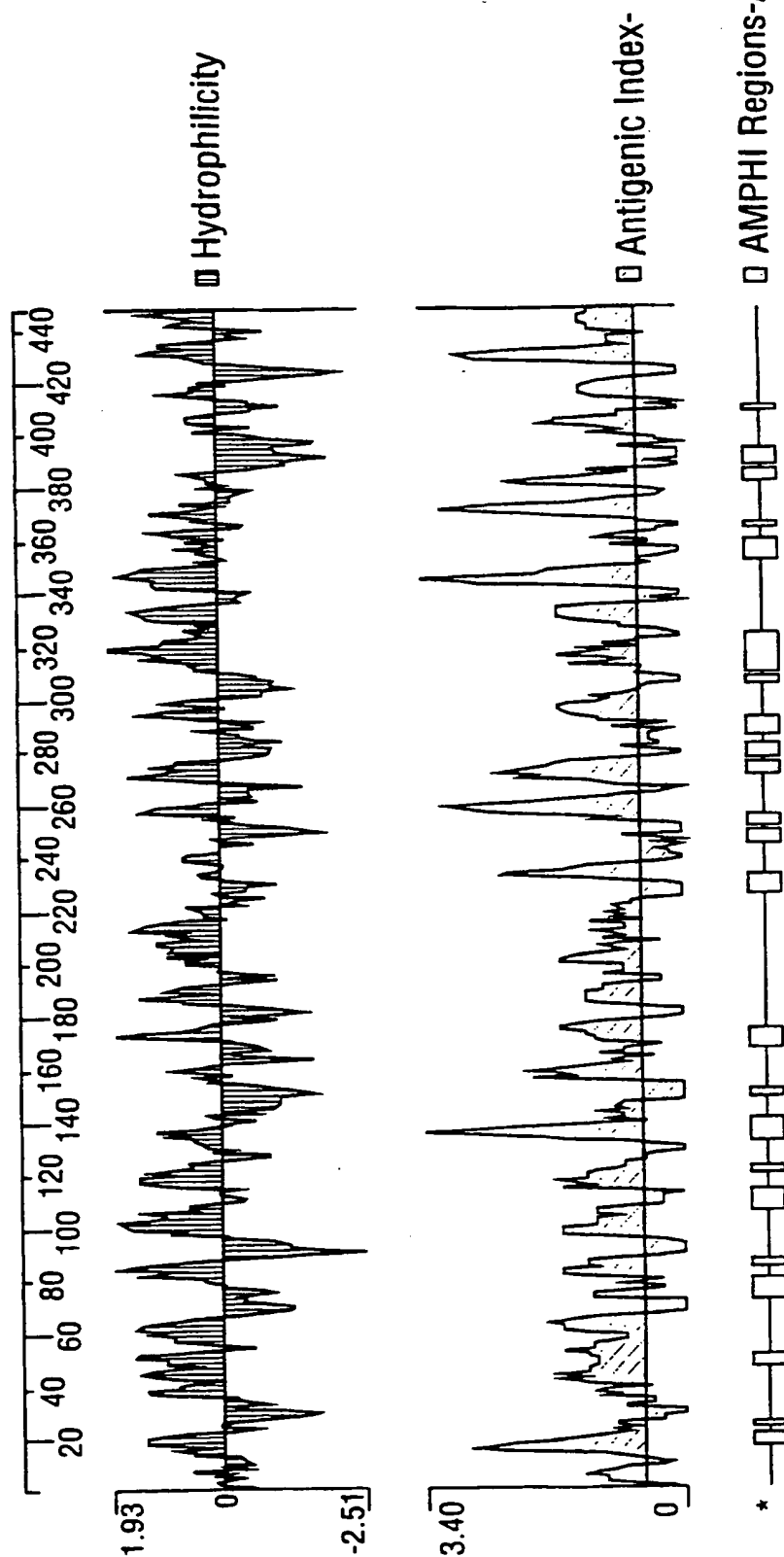
FIG. 10  
ORF15



SUBSTITUTE SHEET (RULE 26)

12/51

FIG. 11  
ORF22

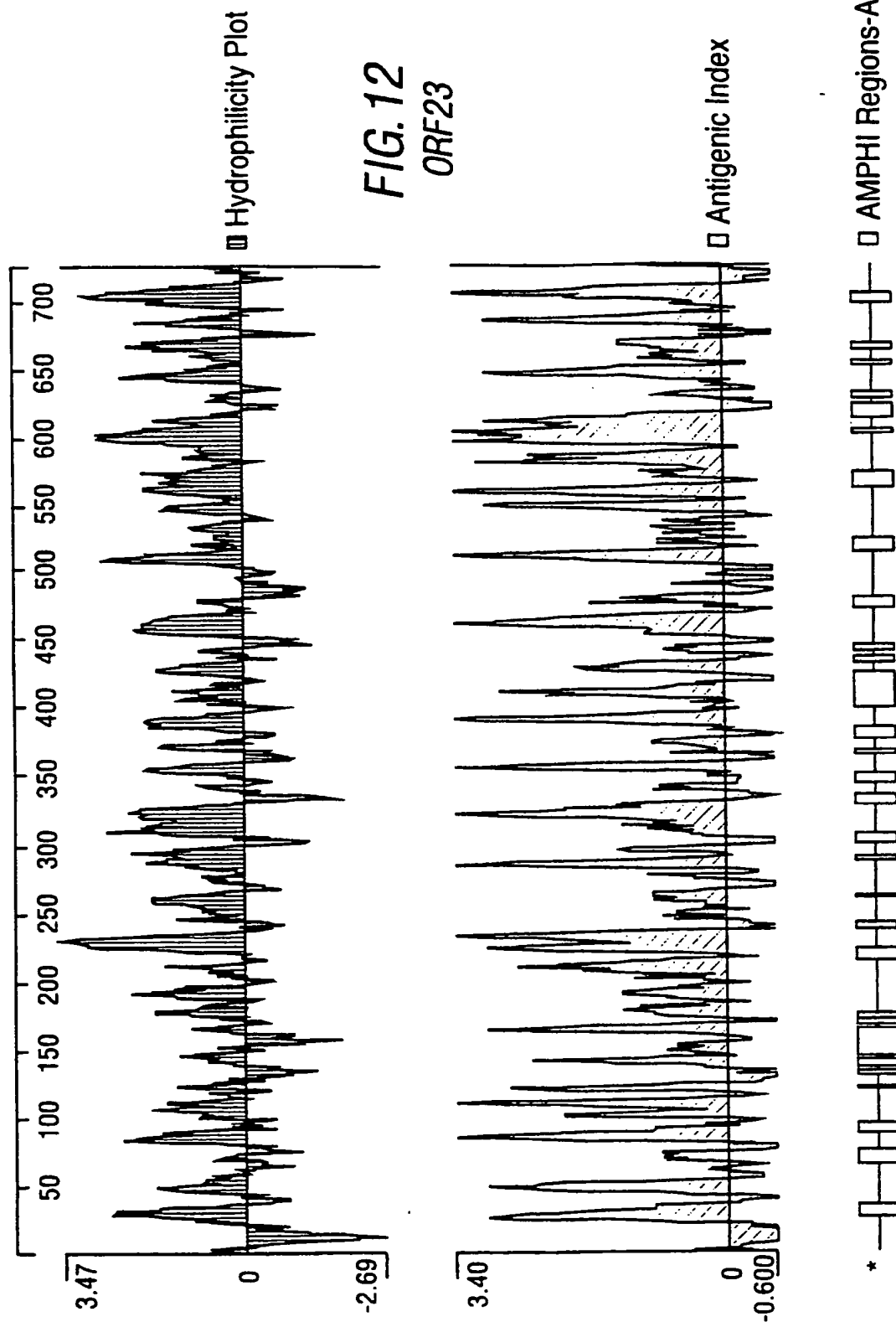


SUBSTITUTE SHEET (RULE 26)



13/51

FIG. 12  
ORF23



SUBSTITUTE SHEET (RULE 26)

14/51

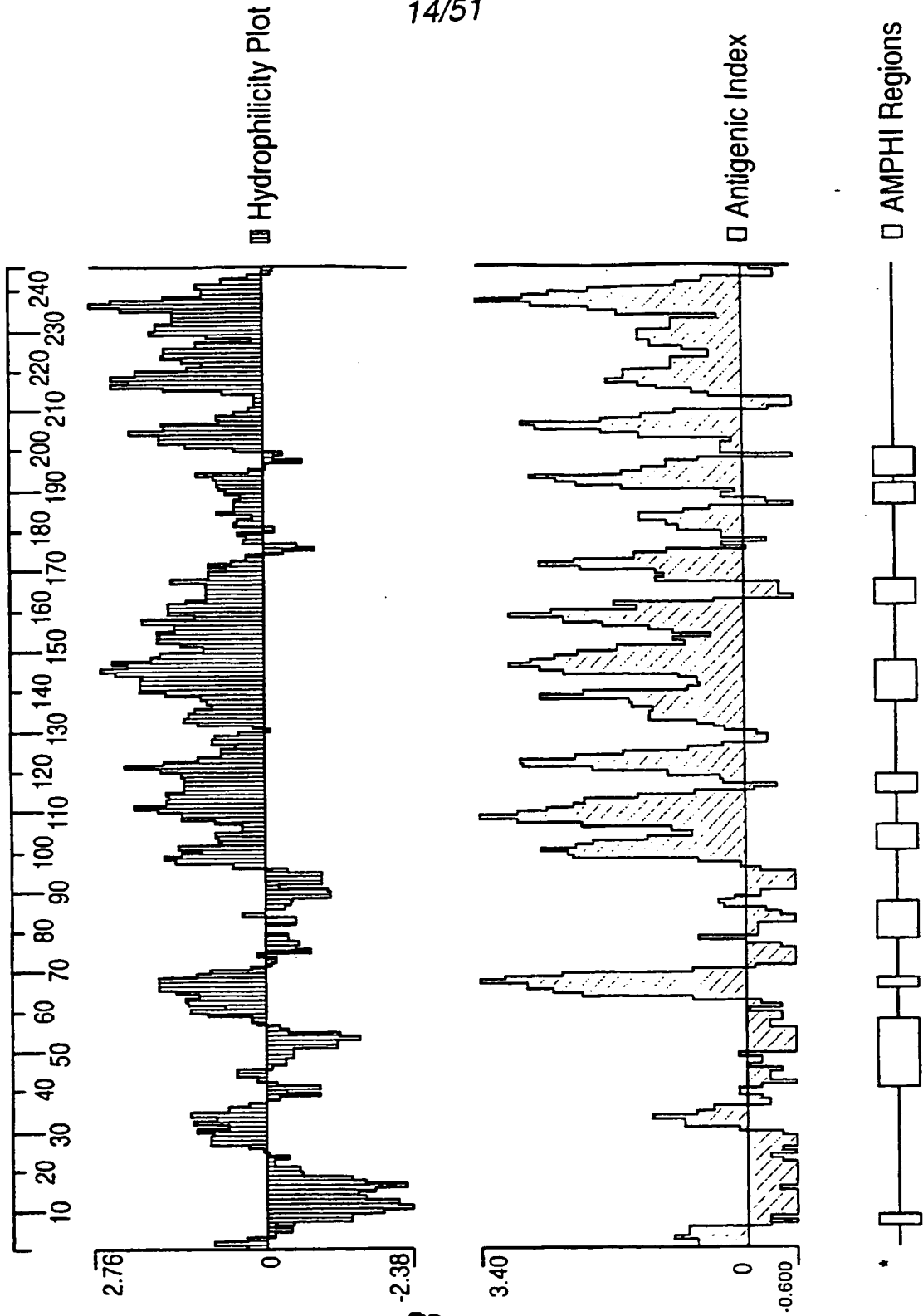


FIG. 13

ORF27

SUBSTITUTE SHEET (RULE 26)

FIG. 14  
ORF28

15/51

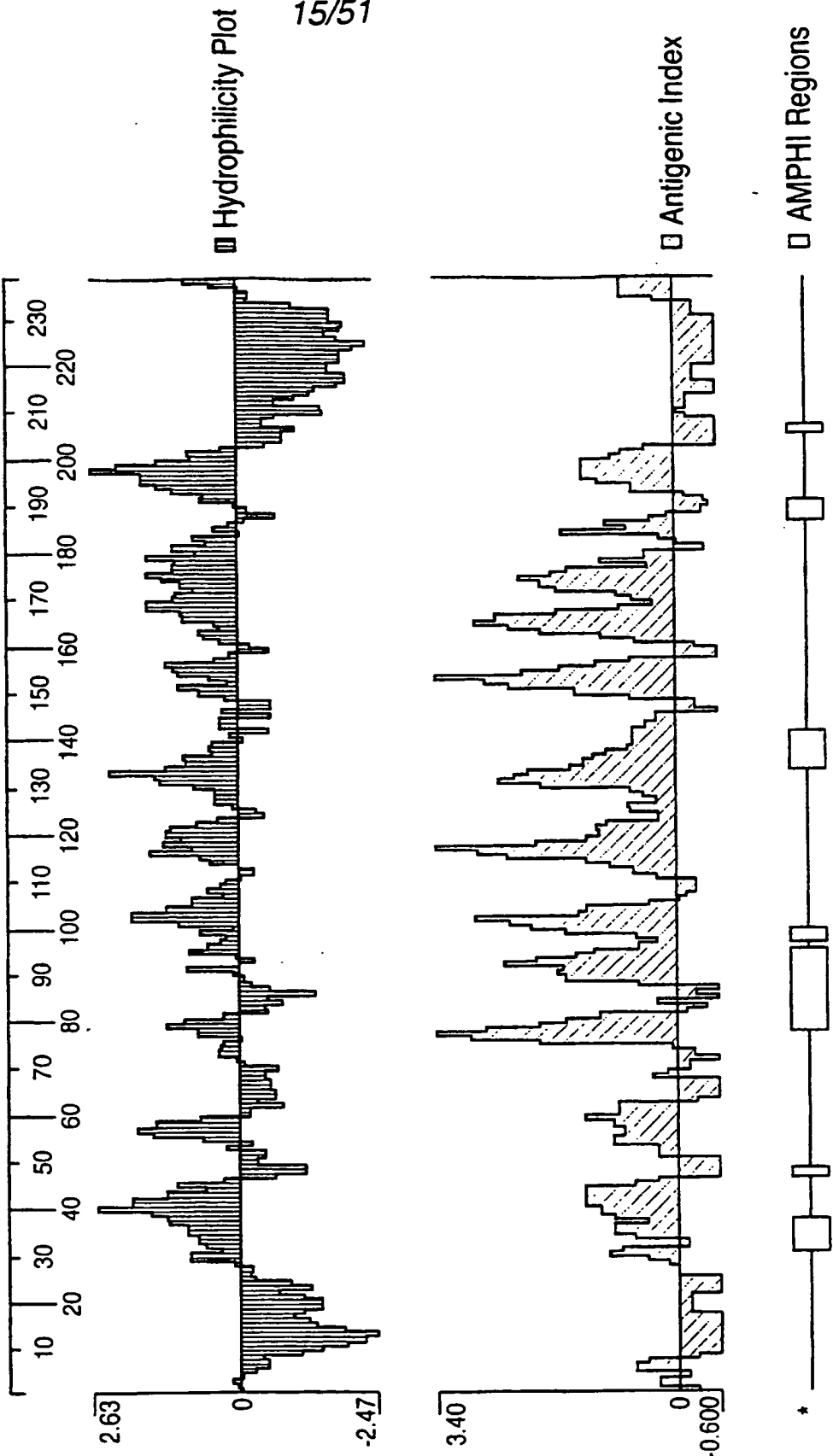
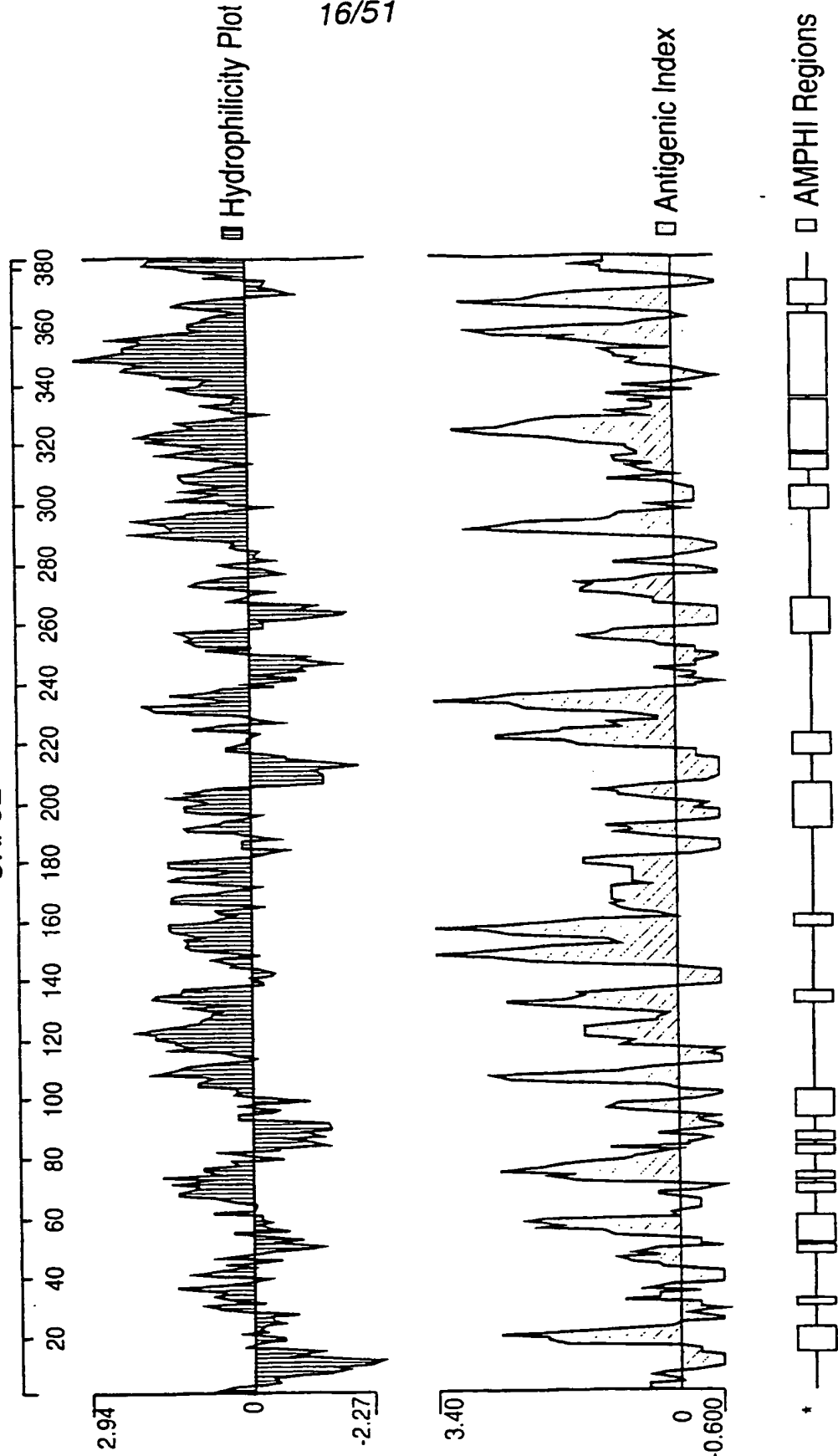


FIG. 15  
ORF32

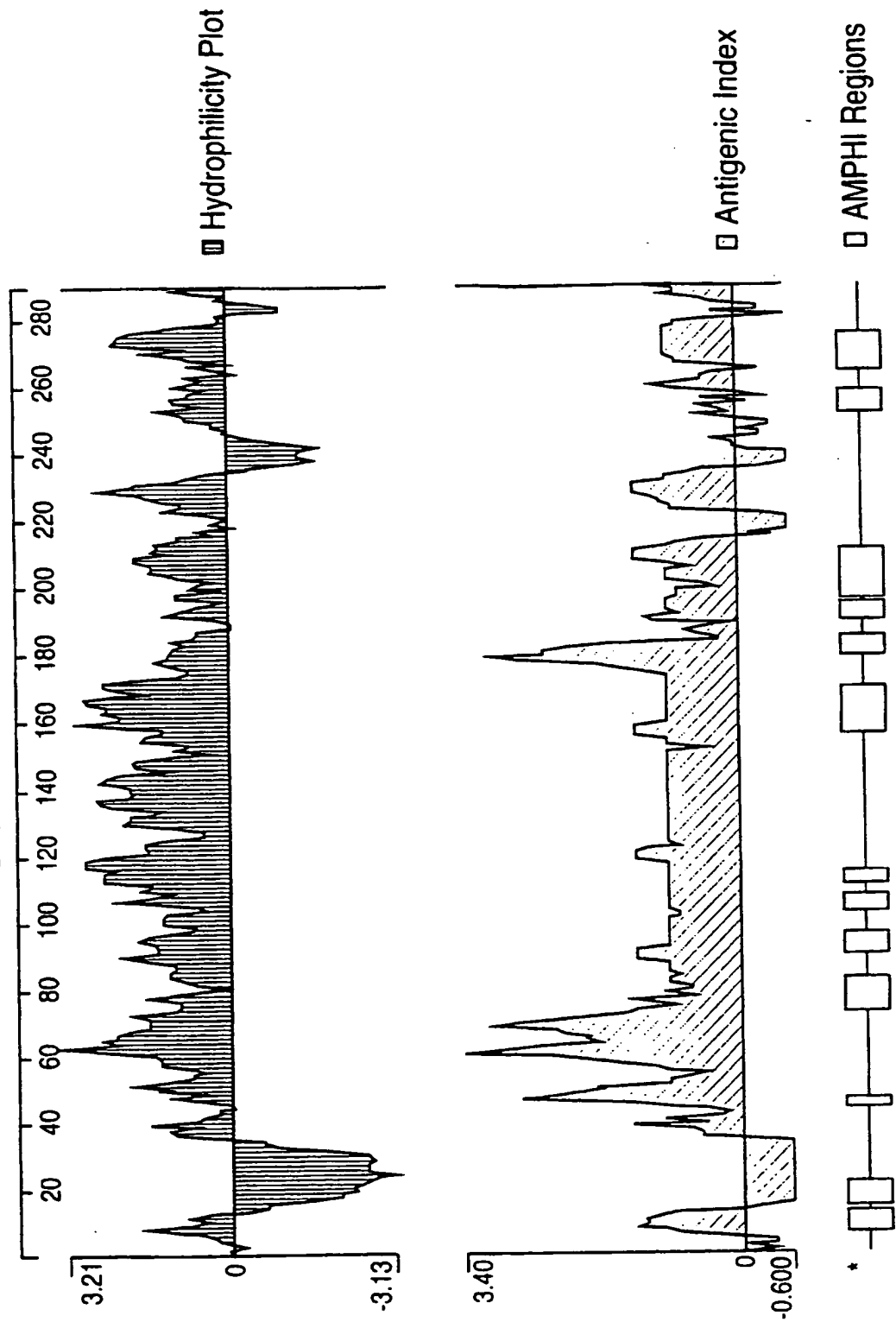
16/51



SUBSTITUTE SHEET (RULE 26)

17/51

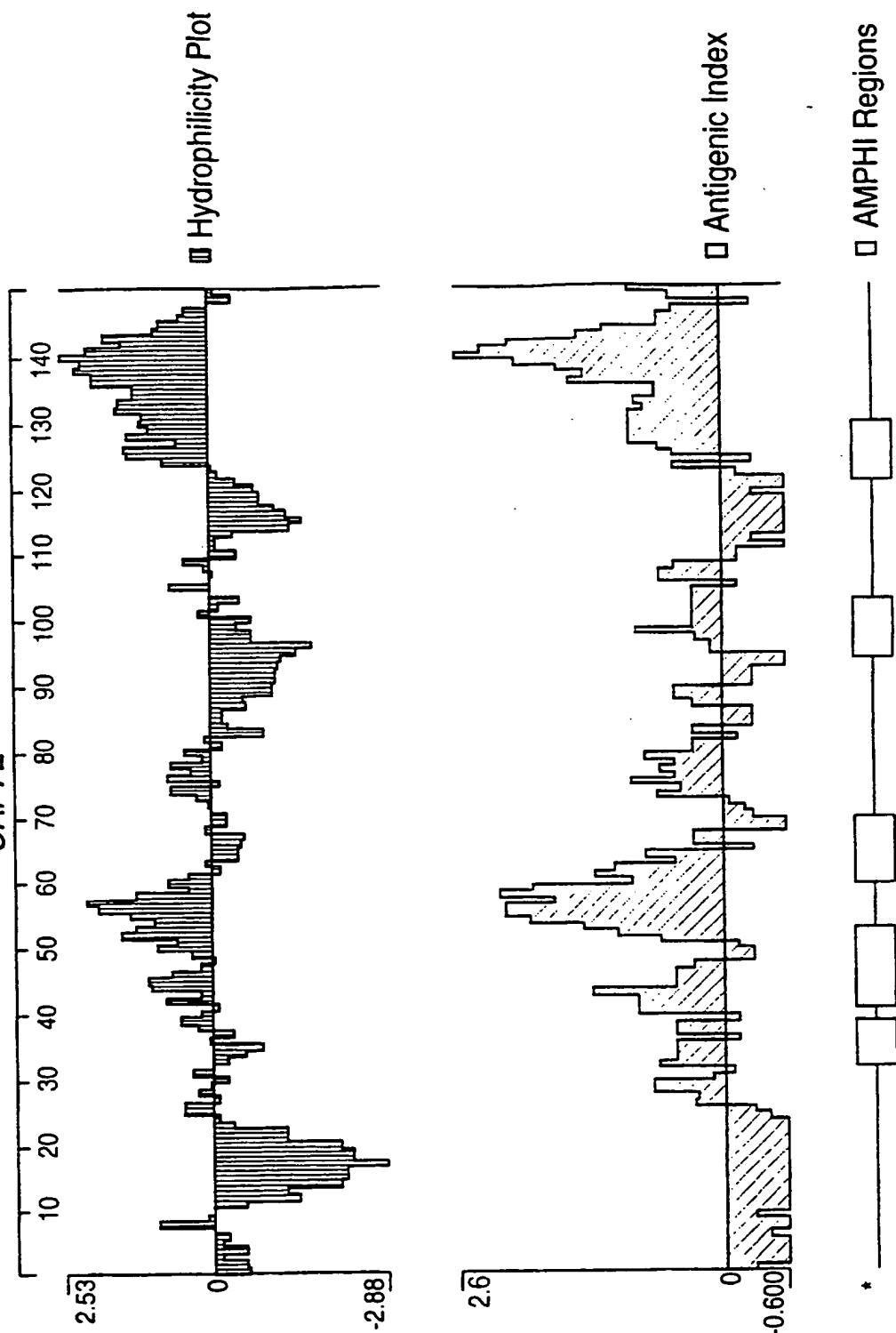
**FIG. 16**  
ORF65



SUBSTITUTE SHEET (RULE 26)

18/51

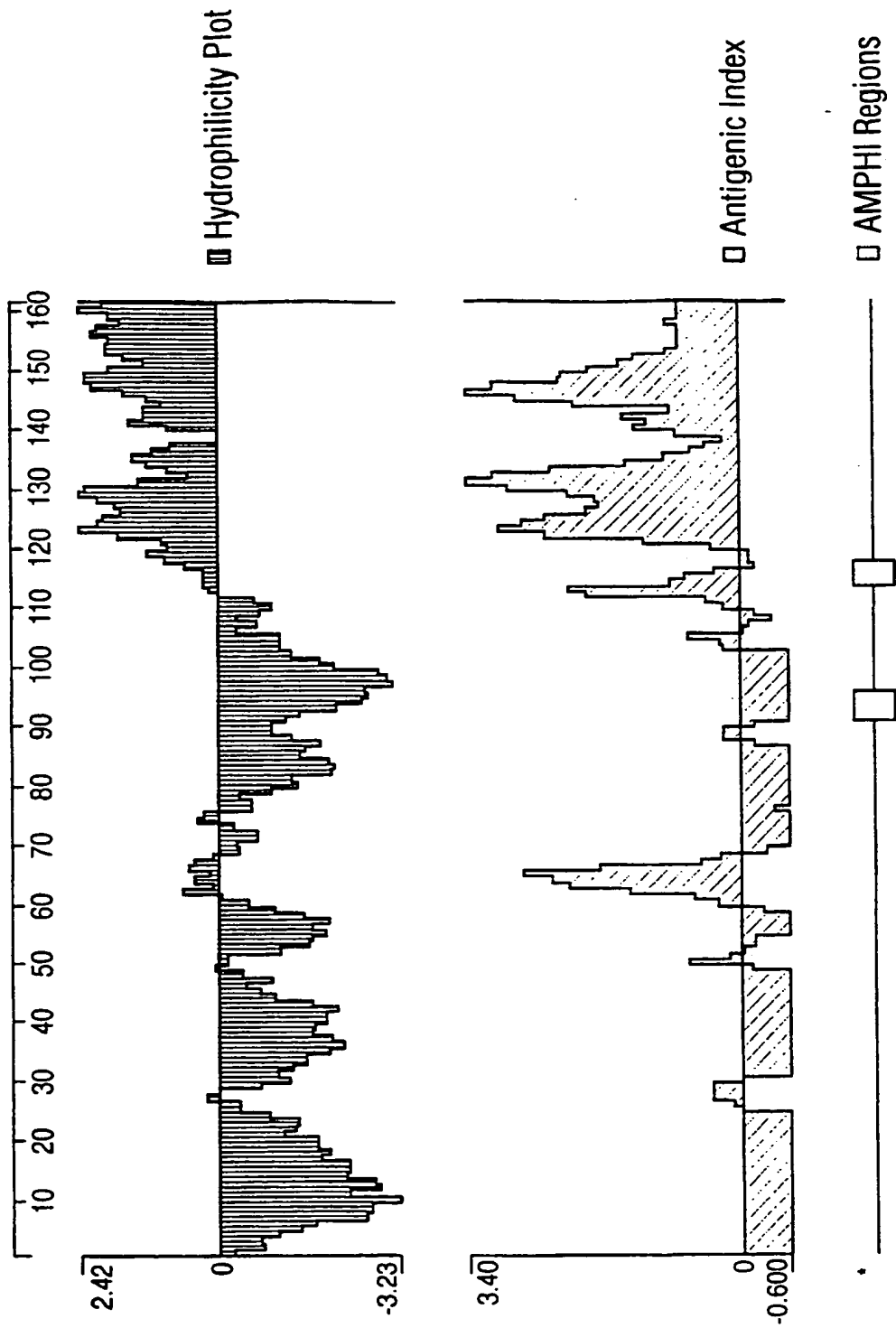
FIG. 17  
ORF72



SUBSTITUTE SHEET (RULE 26)

19/51

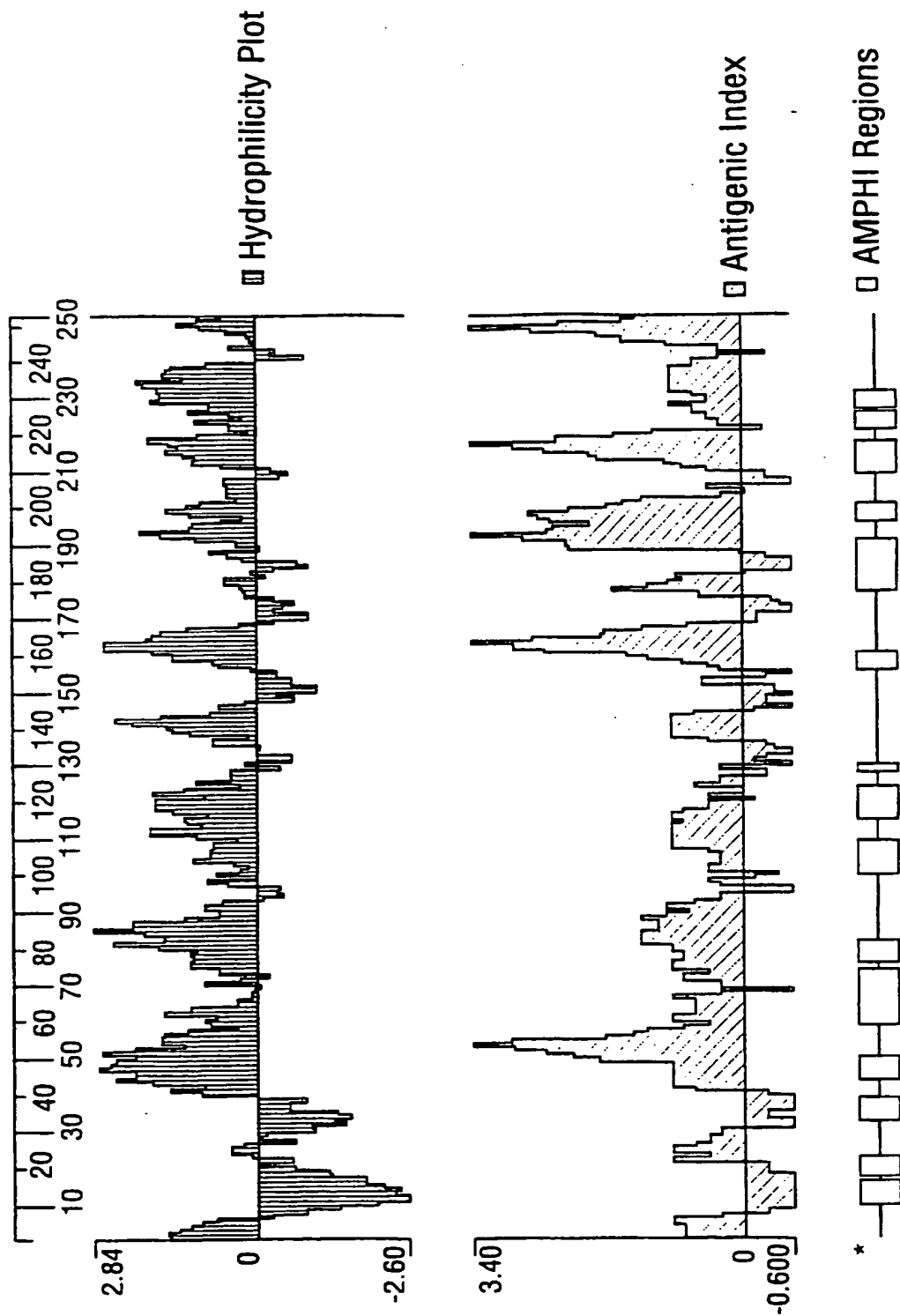
FIG. 18  
ORF73



SUBSTITUTE SHEET (RULE 26)

20/51

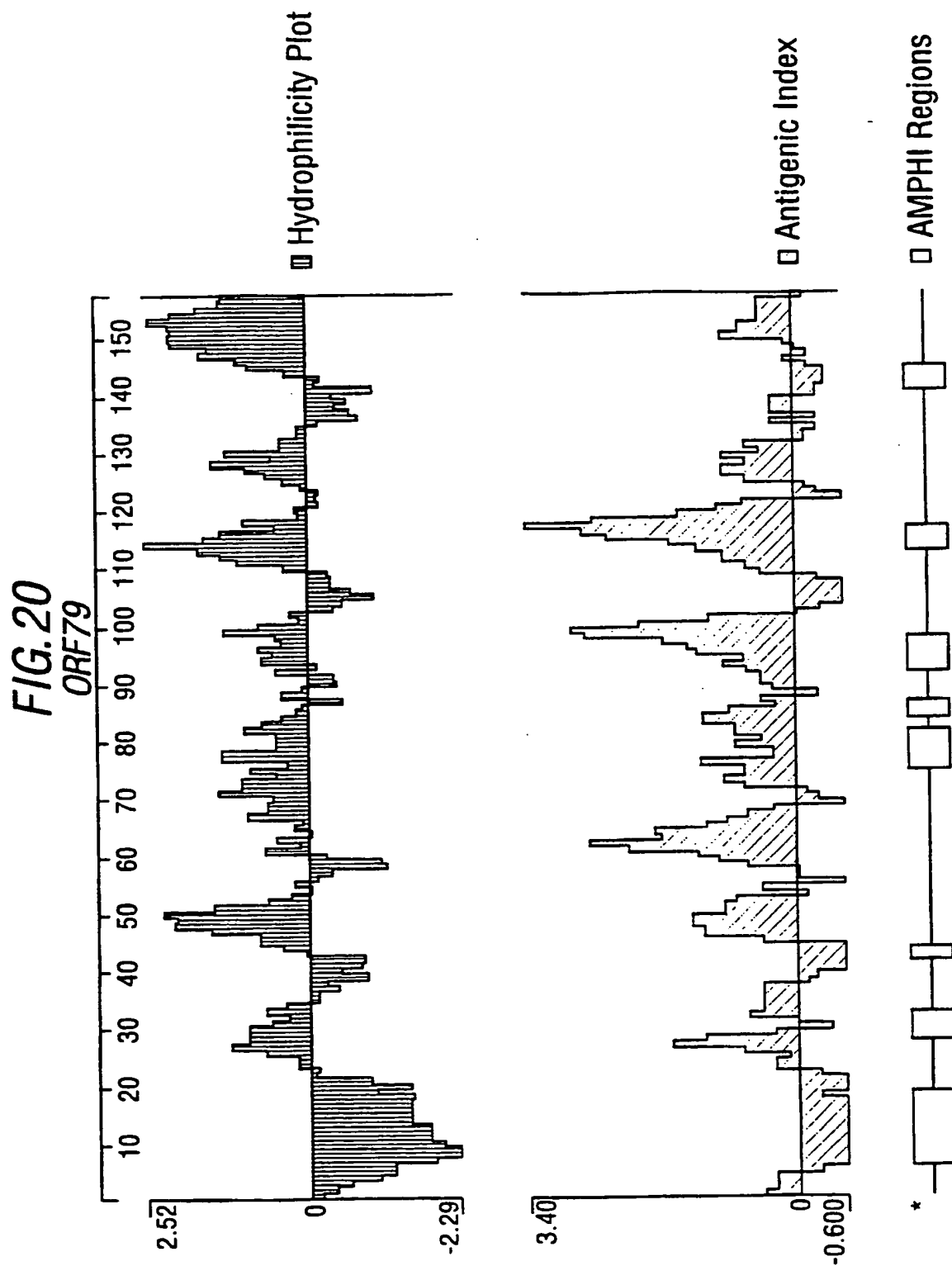
FIG. 19  
ORF76



SUBSTITUTE SHEET (RULE 26)

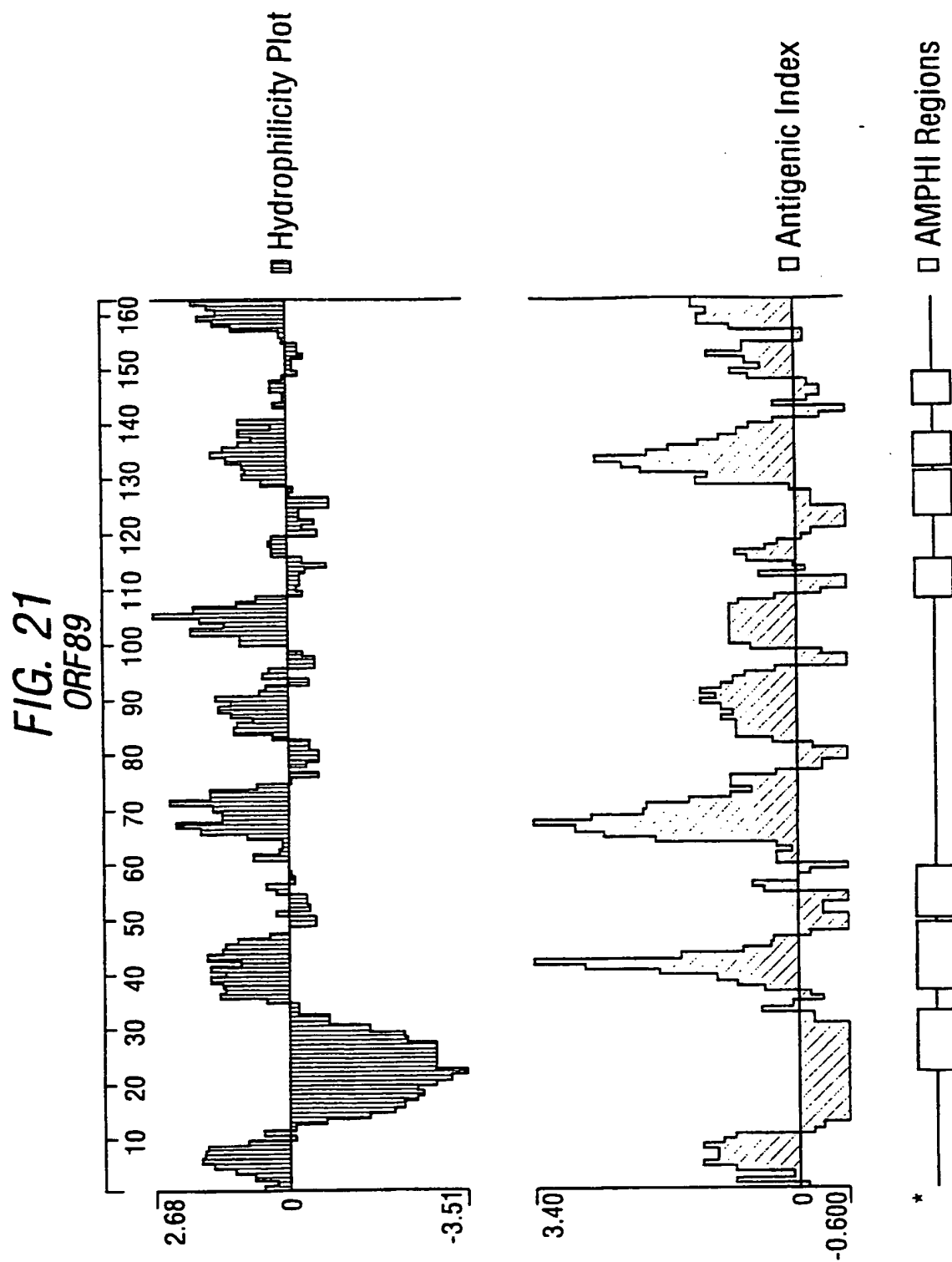


21/51



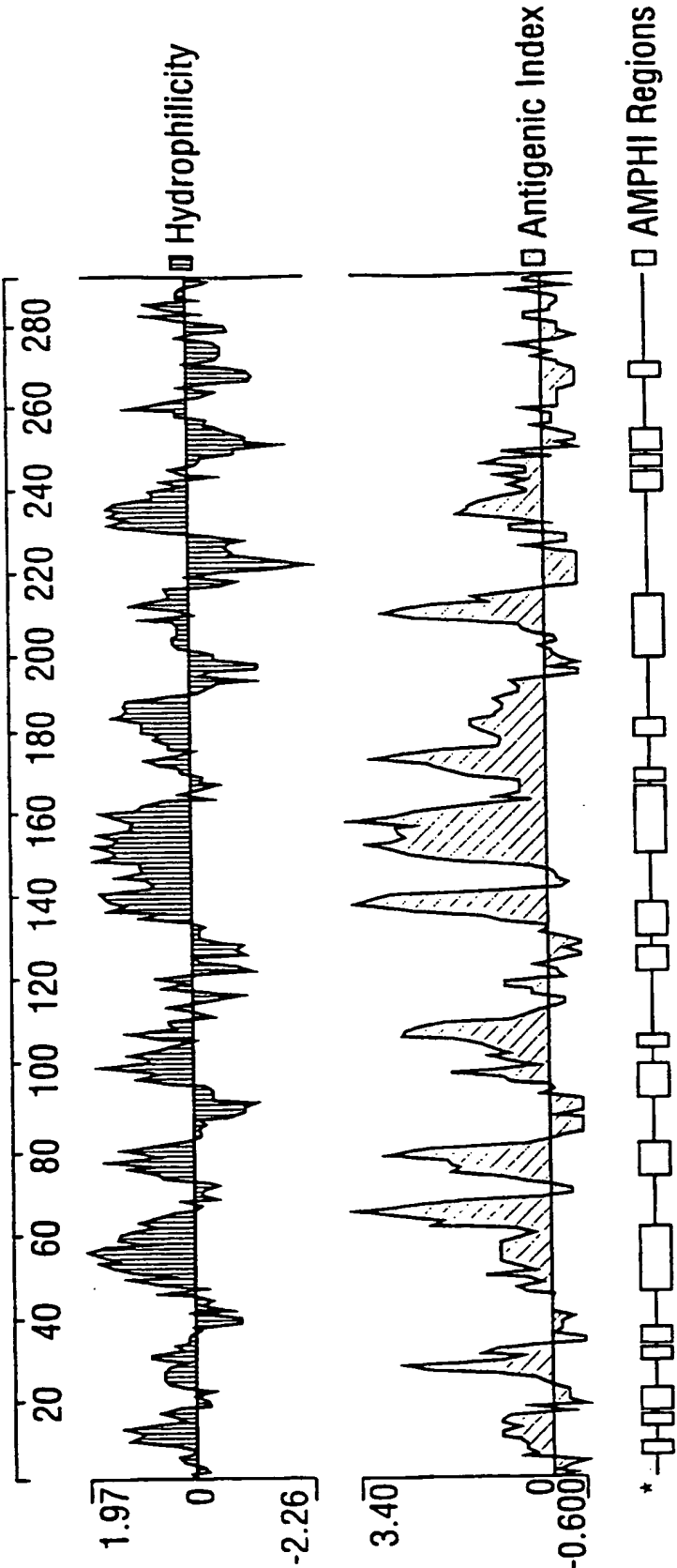
SUBSTITUTE SHEET (RULE 26)

22/51



SUBSTITUTE SHEET (RULE 26)

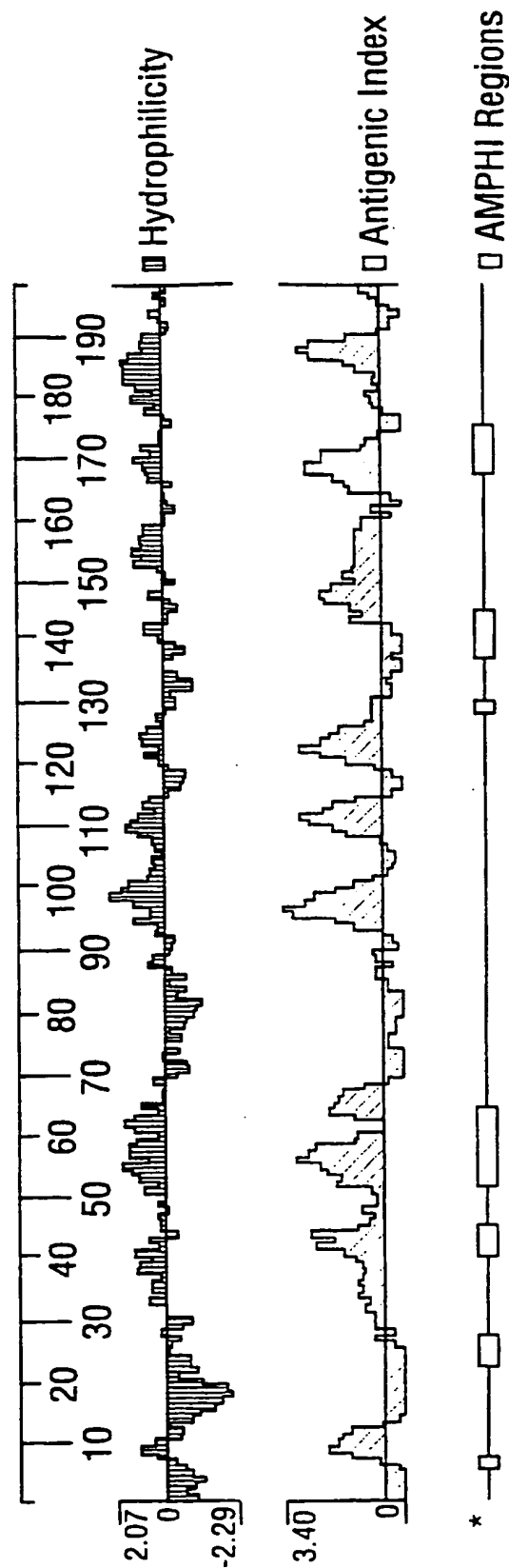
FIG. 22  
ORF105



SUBSTITUTE SHEET (RULE 26)

24/51

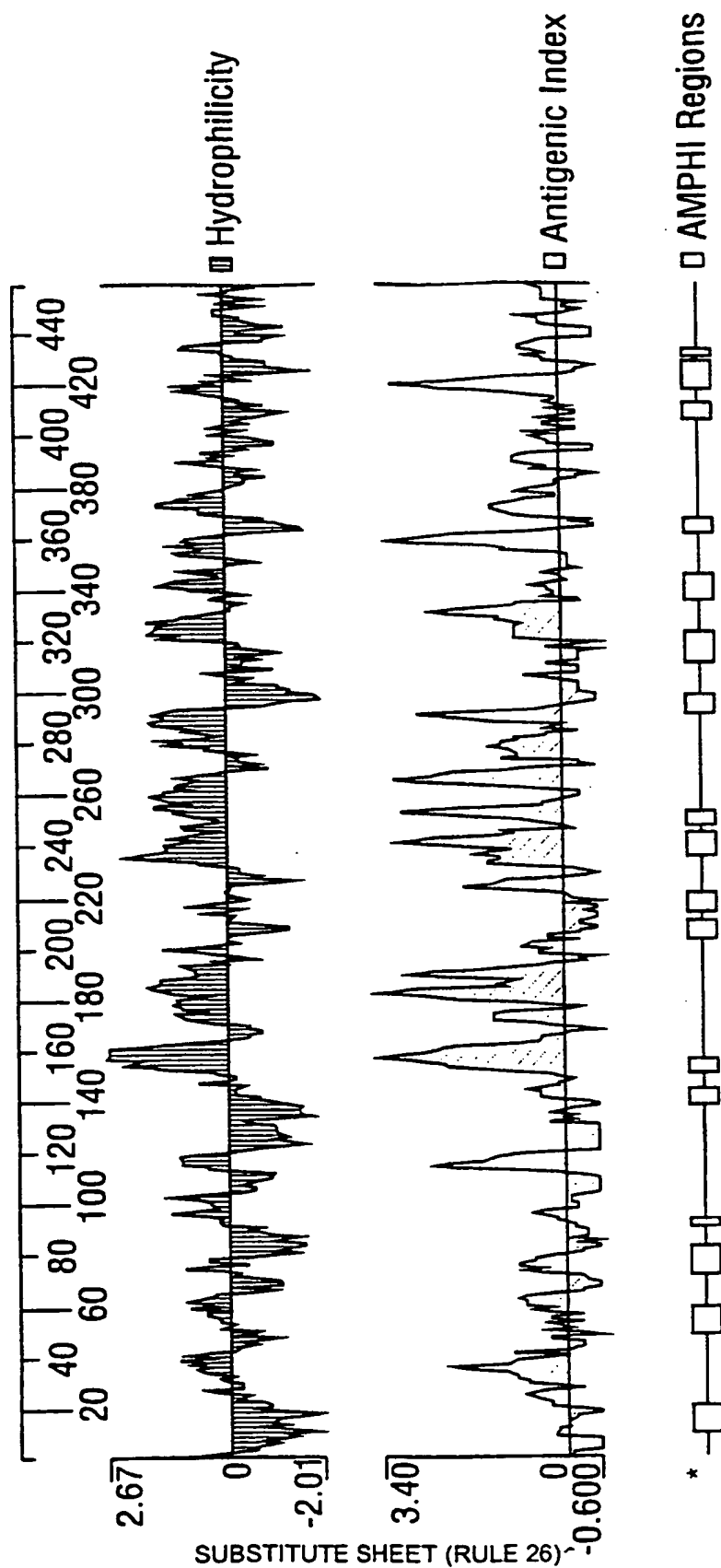
FIG. 23  
ORF106



SUBSTITUTE SHEET (RULE 26)

25/51

FIG. 24  
ORF132



26/51

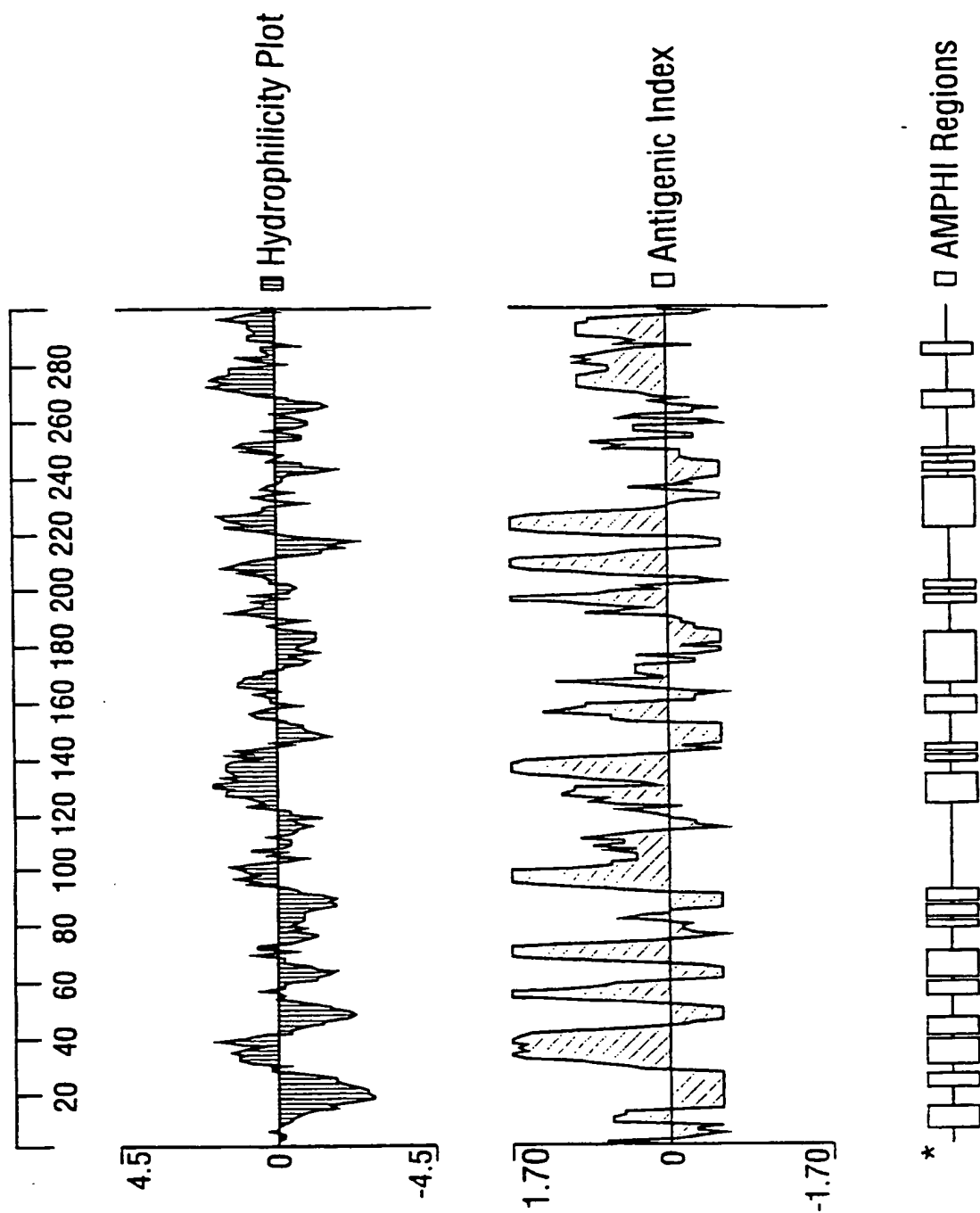
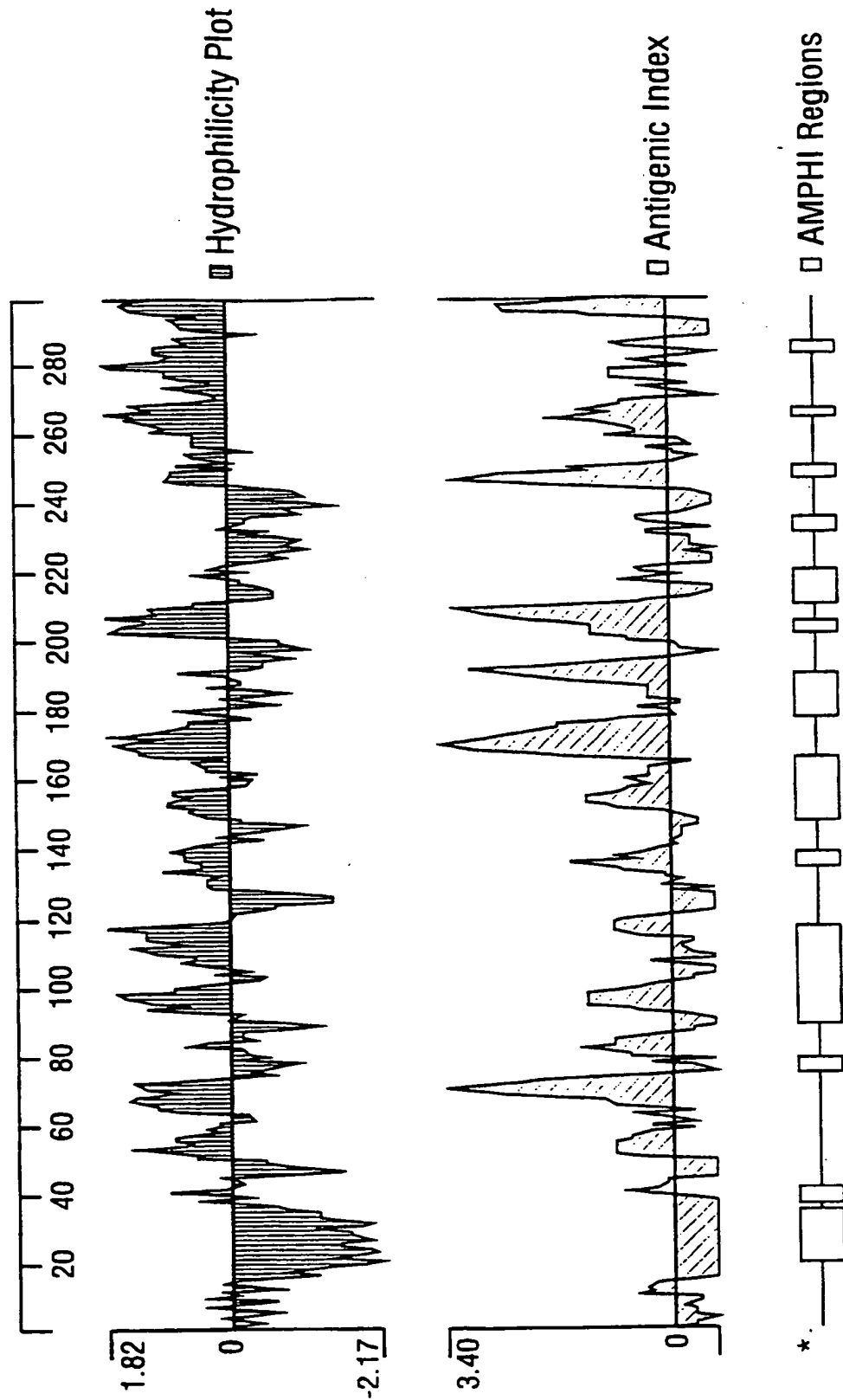


FIG. 25  
ORF137

SUBSTITUTE SHEET (RULE 26)

27/51

FIG. 26  
ORF138



SUBSTITUTE SHEET (RULE 26)

28/51

FIG. 27  
ORF143

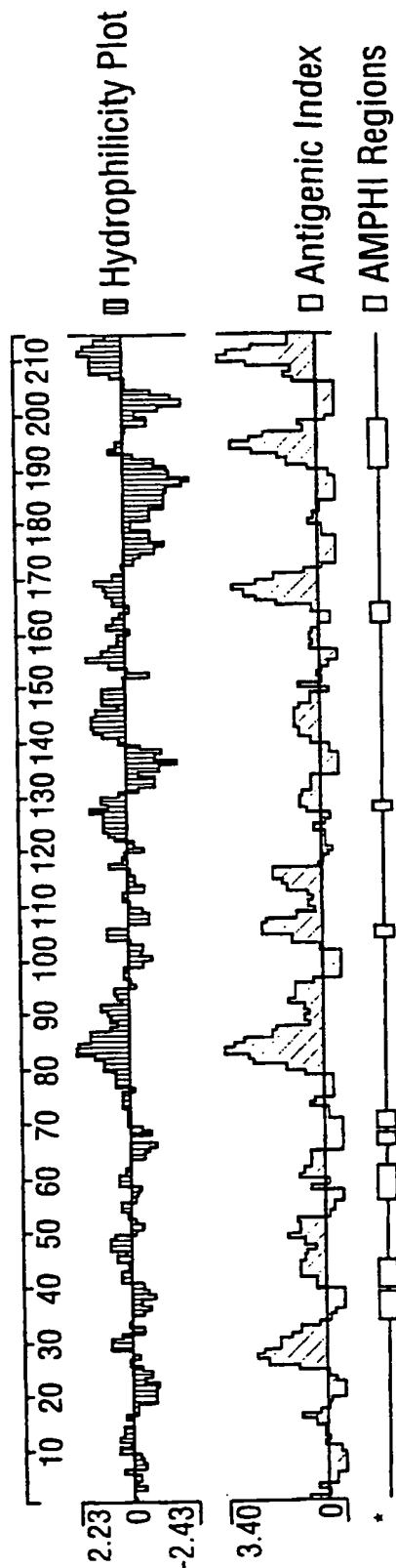
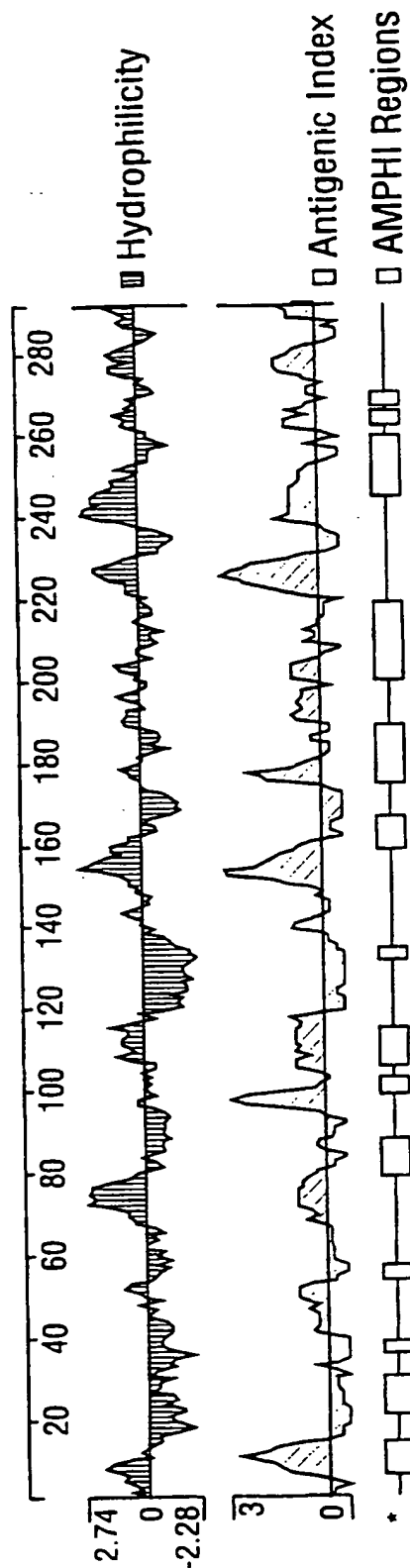


FIG. 28  
ORF147



SUBSTITUTE SHEET (RULE 26)



29/51

**FIG. 29**  
NspA sequences

	Signal Peptide			Loop 1		
	-10	1	10	20	30	40
NM 608 B	MKKALATLIA	LALPAAALAE	GASGFYVQAD	AAHAKASSSL	<u>GSAKGFSPRI</u>	SAGYRINDL
NM NG6/88+	-----	-----	-----	-----	-----	-----
NM CU385+	-----	-----	-----	-----	-----	-----
NM 8047+	-----A	-----	-----	-----	-----	-----
NM NGP165-	-----	-----	-----	-----	-----	-----
NM MC58-	-----	-----	-----	-----	-----	-----
NM M986-	-----	-----	-----	-----	-----	-----
NM BZ232-	-----I	-----	-----	-----	-----	-----
NM M136-	-----I	-----	-----	-----	-----	-----
NM NG3/88-	-----I	-----	-----	-----	-----	-----
NG FA1090	-----A	-----	-----	-----*	-----	-----
NG B2	-----A	-----	-----	-----	-----	-----

SUBSTITUTE SHEET (RULE 26)

30/51

FIG. 29 (contd.)  
NspA sequences

	Loop 2					Loop 3				
	50	60	70	80	90	100				
NM 608B	RFAVDYTRYK	<u>NYKAPSTDFK</u>	LYSIGASAIY	DFDTQSPVKP	YLGARLSLNR	ASVDLGGSDS				
NM NG6/88+	-----	-----	-----	-----	-----	-----				
NM CU385+	-----	-----	-----	-----	-----	-----				
NM 8047+	-----	-----	-----	-----	-----	-----				
NM NGP165-	-----	-----	-----	-----	-----	-----				
NM MC58-	-----	-----	-----	-----	-----	-----				
NM M986-	-----	-----	-----	-----	-----	-----				
NM BZ232-	-----	-----	-----	-----	-----	-----				
NM M136-	-----	-----	-----	-----	-----	-----				
NM NG3/88-	-----	-----	-----	-----	-----	-----				
NG FA1090	-----	-----Q-----	-----V-----	-----F-----	-----AH-----	-----				
NG B2	-----	-----	-----V-----	-----F-----	-----AH-----	-----				

SUBSTITUTE SHEET (RULE 26)

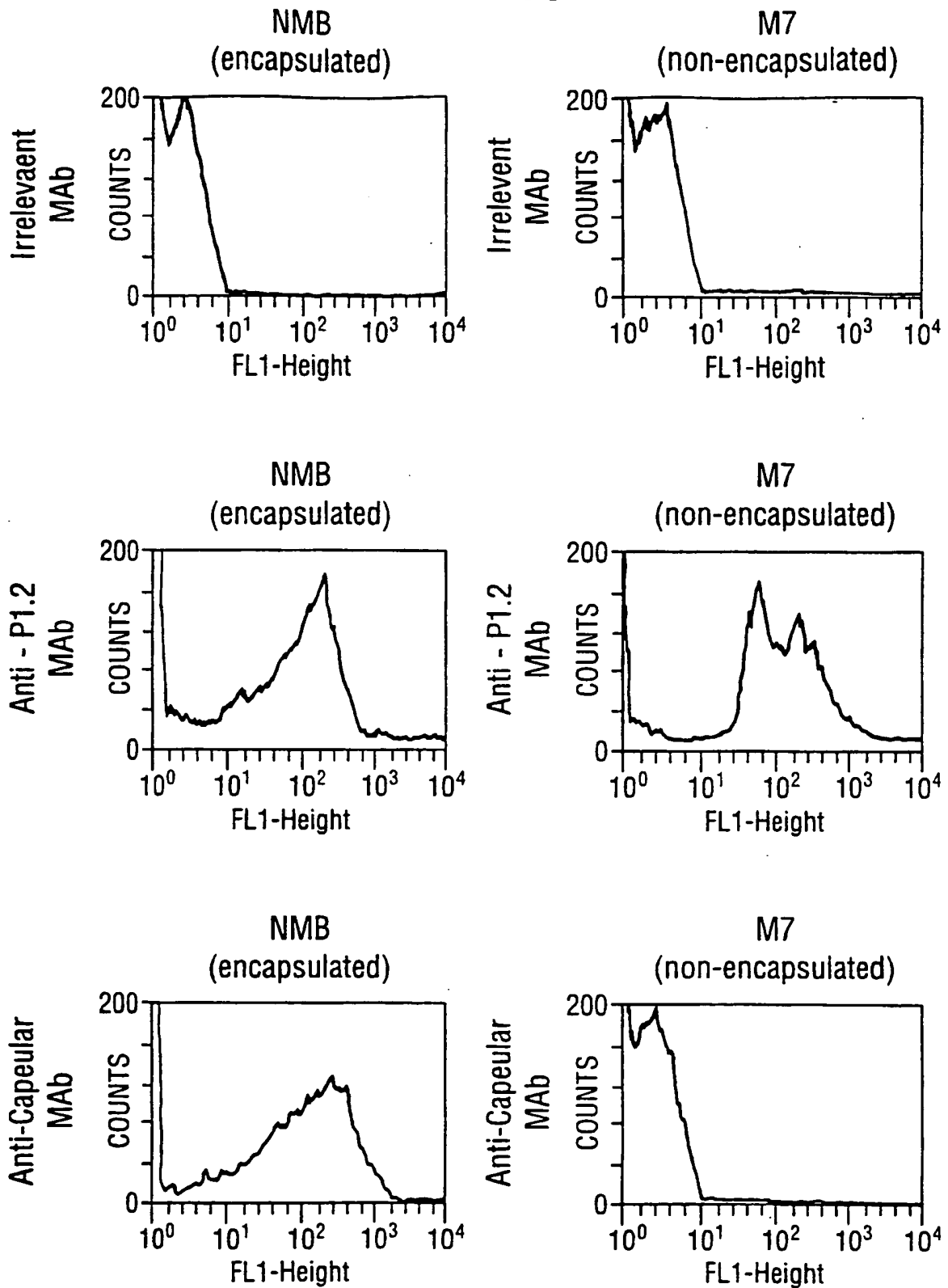
31/51

	110	120	130	140	150
	Loop 4				
NM 608B	<u>FSQTSIGLGV</u>	LTGVS	YAVTP	NVDLDAGYR	<u>NYIGKVN</u> TVK NVRSGELSVG VRVKF
NM NG6/88+	---	---	---	---	---
NM 8047+	---	---	---	---	---
NM CU385+	---	---	---	---	---
NM NGP165-	---	---	---	---	---
NM MC58-	---	---	---	---	---
NM M986-	---	---	---	---	---
NM BZ232-	---	---	---	---	---
NM M136-	---	---	---	---	---
NM NG3/88-	---	---	---	---	---
NG FA1090	---	---	---	---	---
NG B2	---	---	---	---	---

FIG. 29 (contd.)  
NspA sequences

32/51

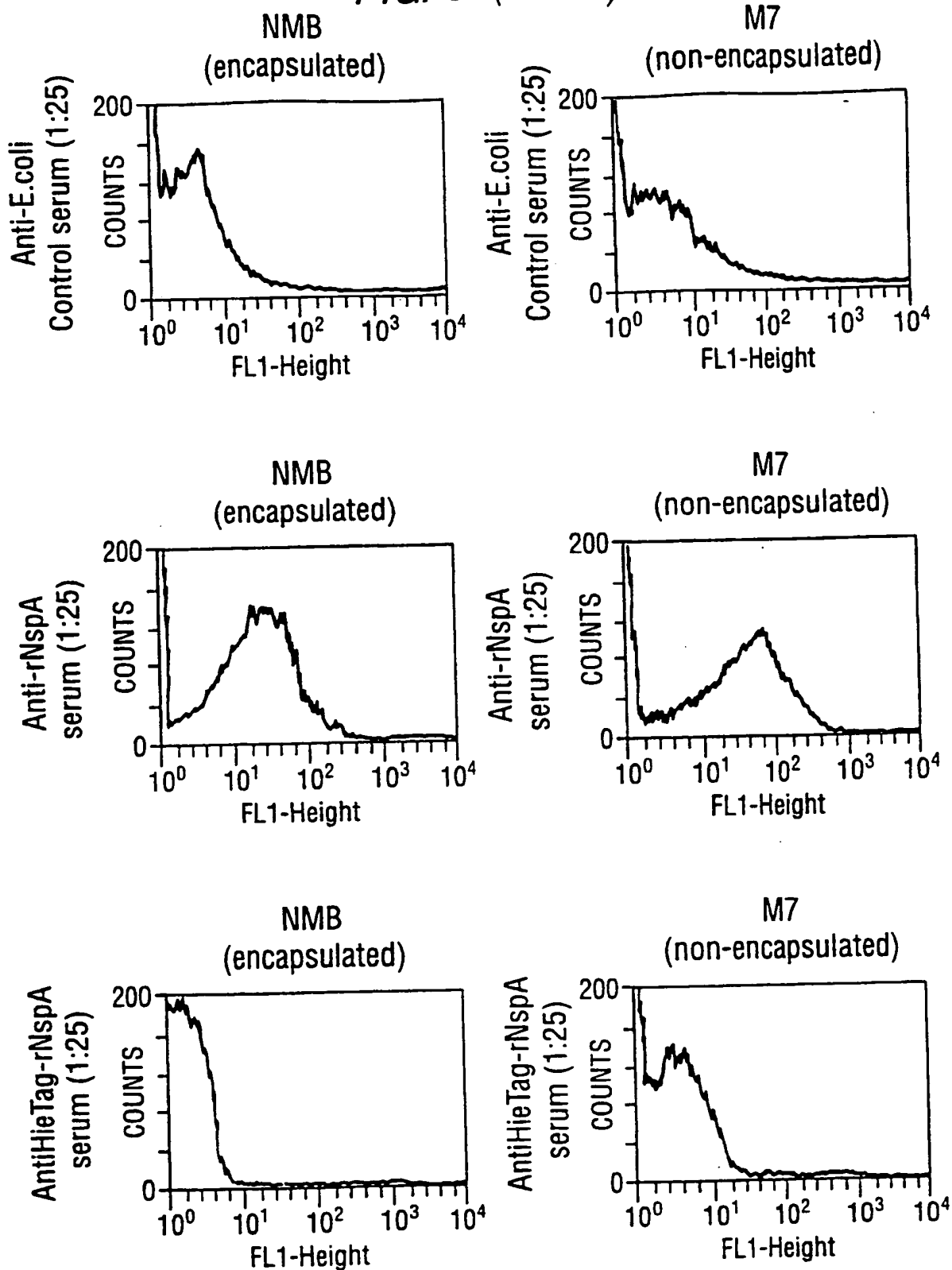
FIG. 30



SUBSTITUTE SHEET (RULE 26)

33/51

## FIG. 30(CONTD.)



SUBSTITUTE SHEET (RULE 26)

FIG. 31A

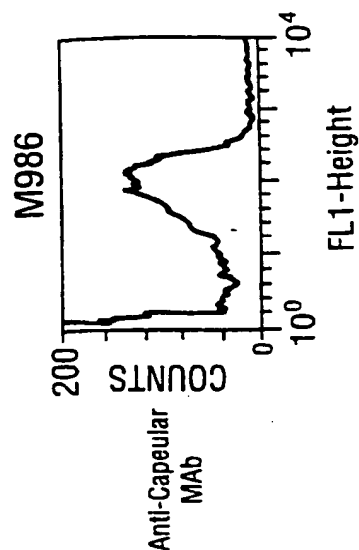
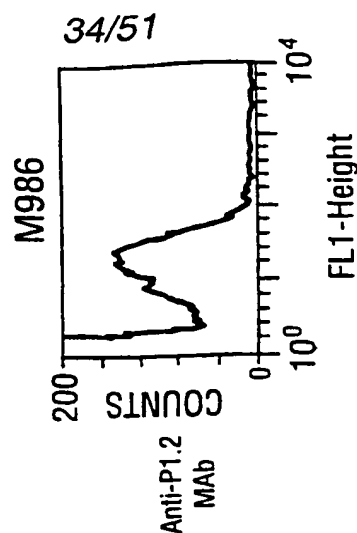
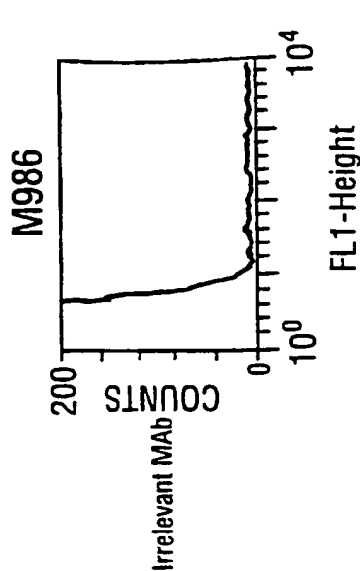
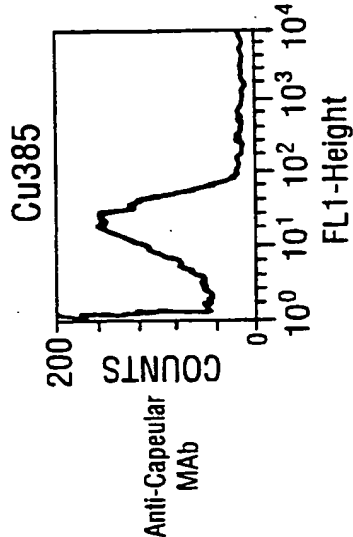
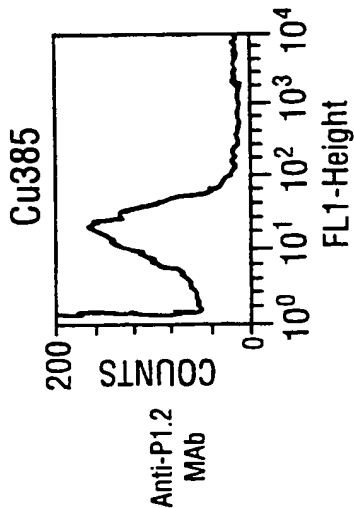
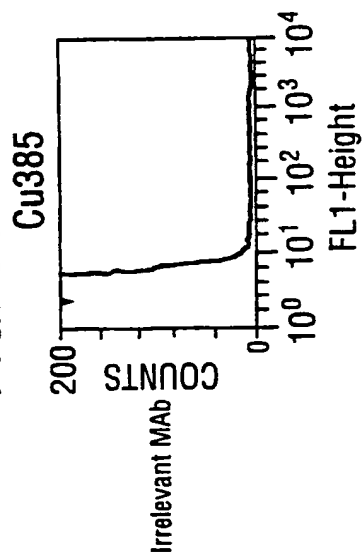
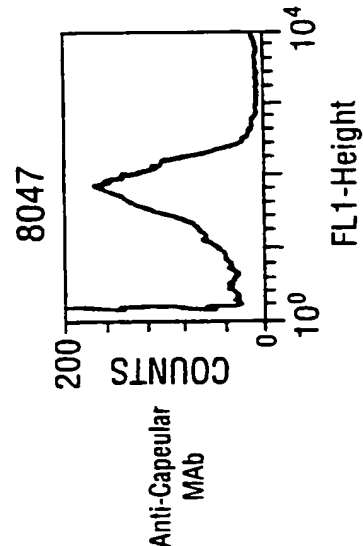
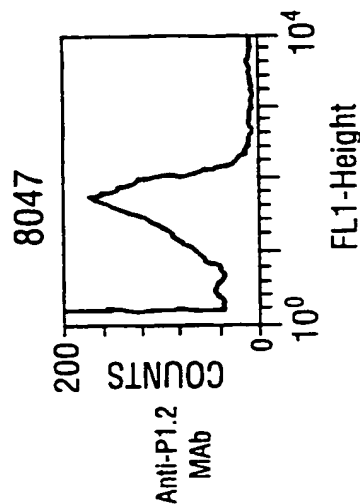
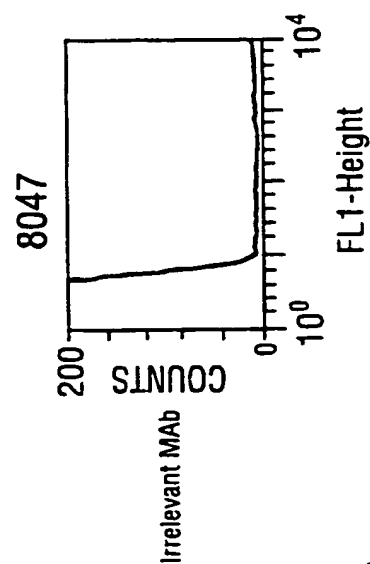
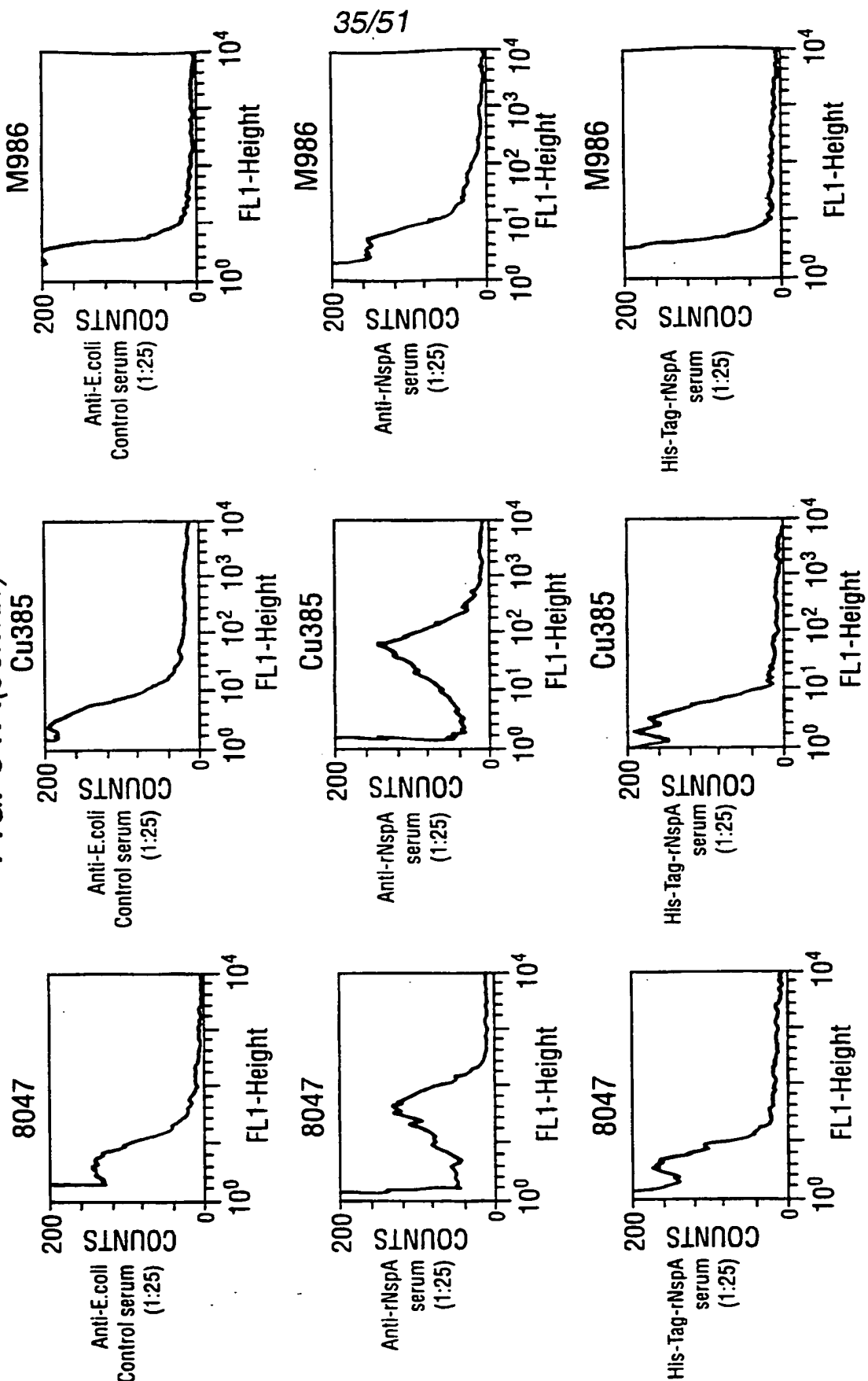


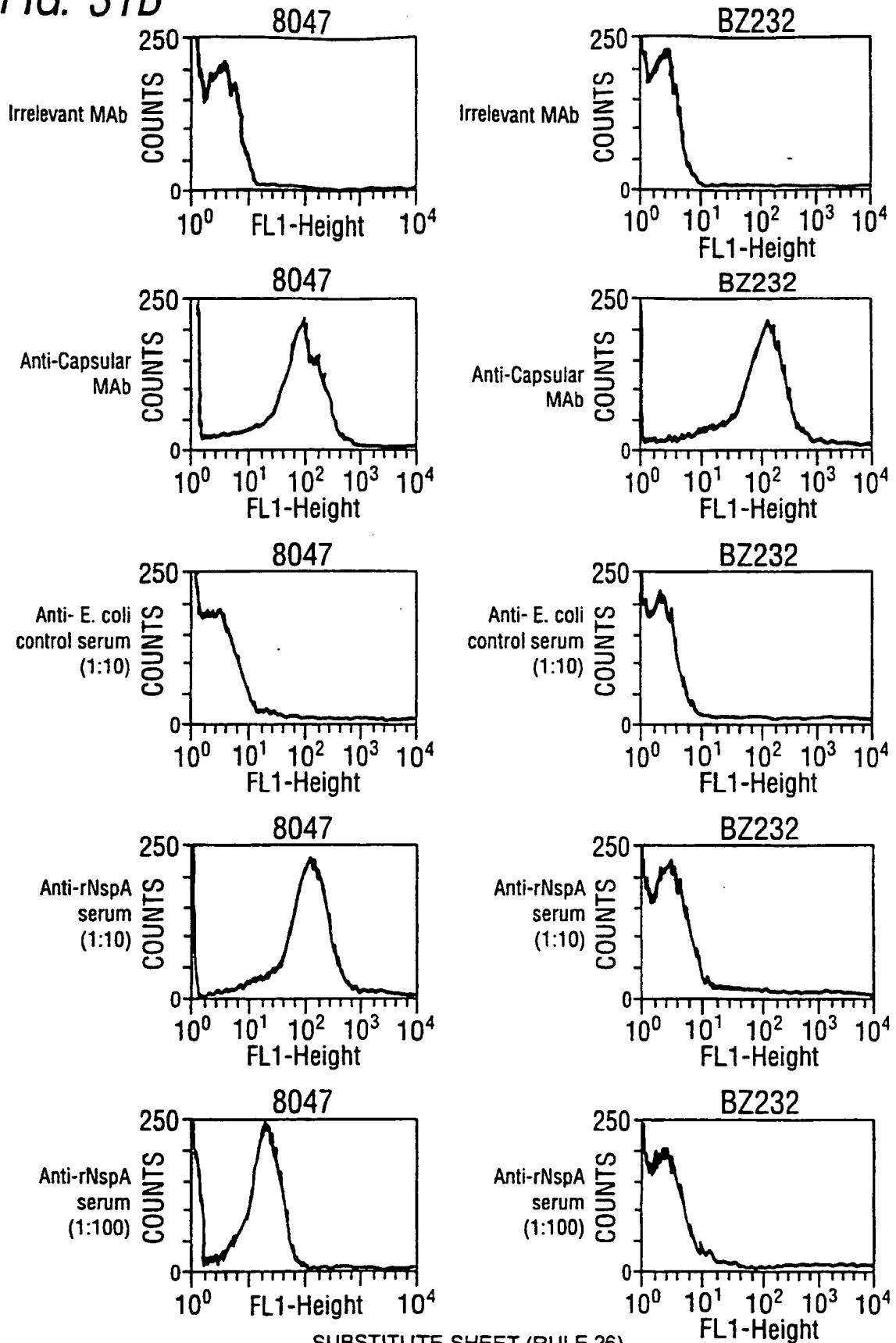
FIG. 31A(CONTD.)



SUBSTITUTE SHEET (RULE 26)

FIG. 31B

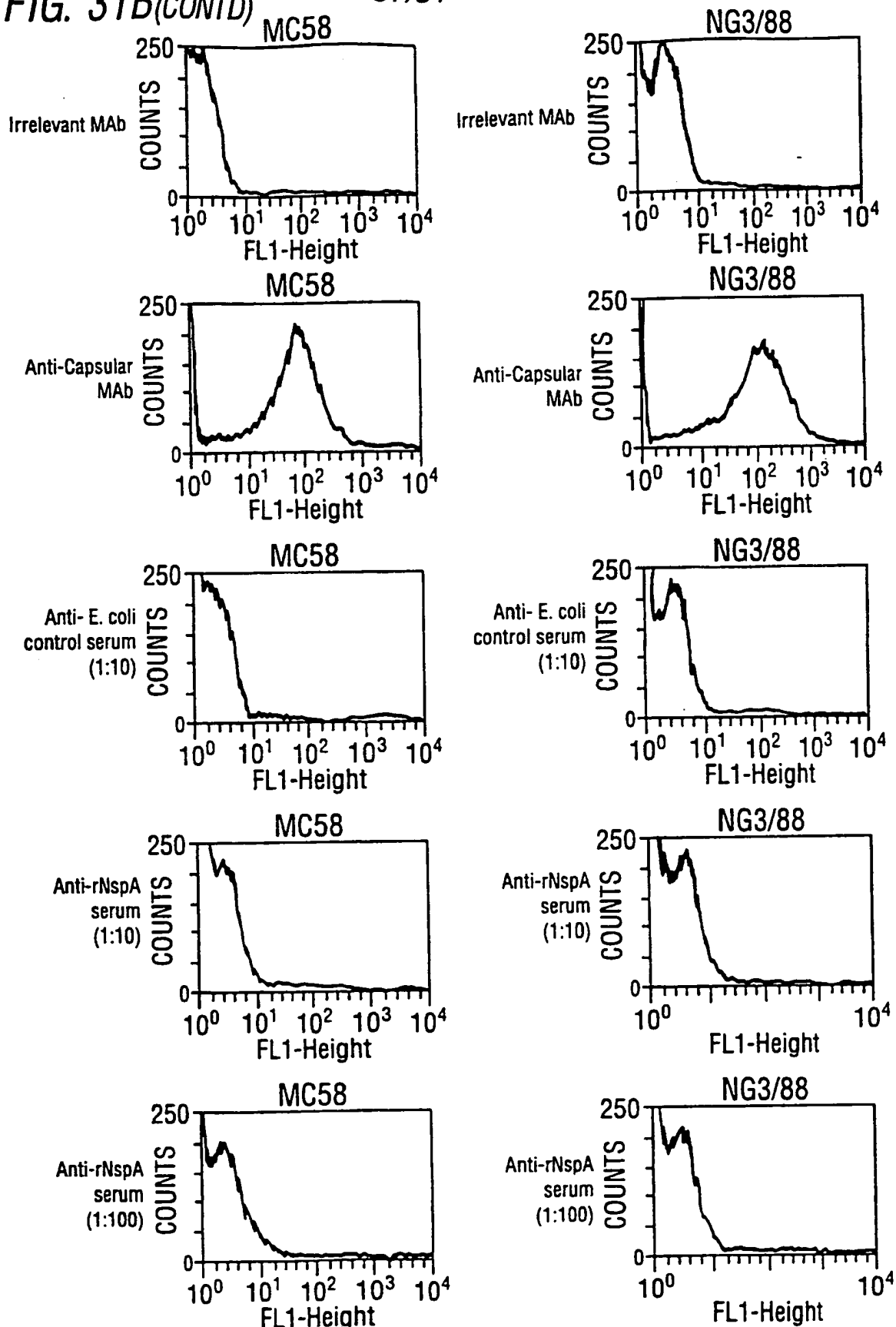
36/51



SUBSTITUTE SHEET (RULE 26)



FIG. 31B(CONTD) 37/51



SUBSTITUTE SHEET (RULE 26)

38/51

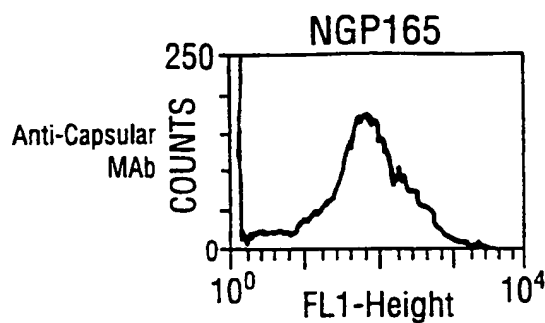
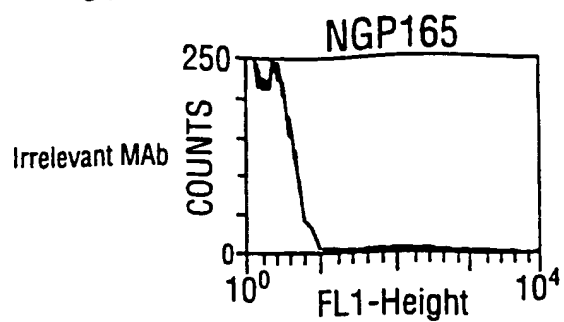
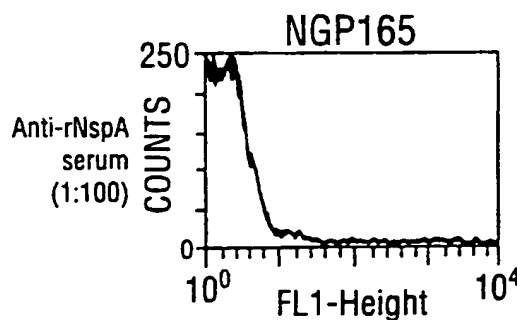
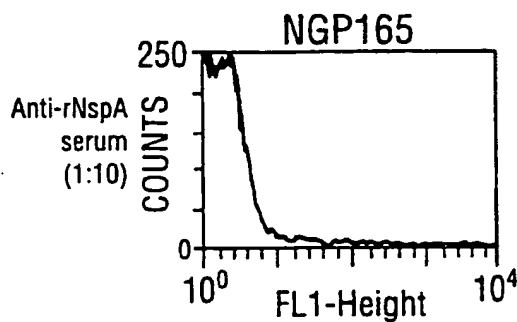
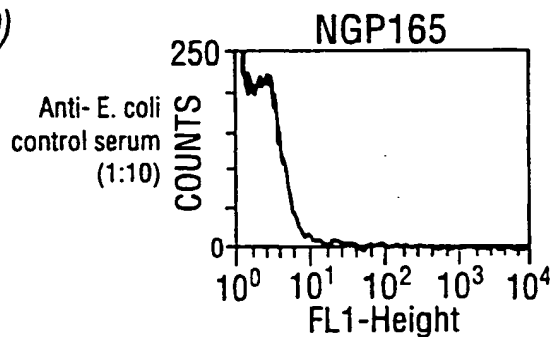


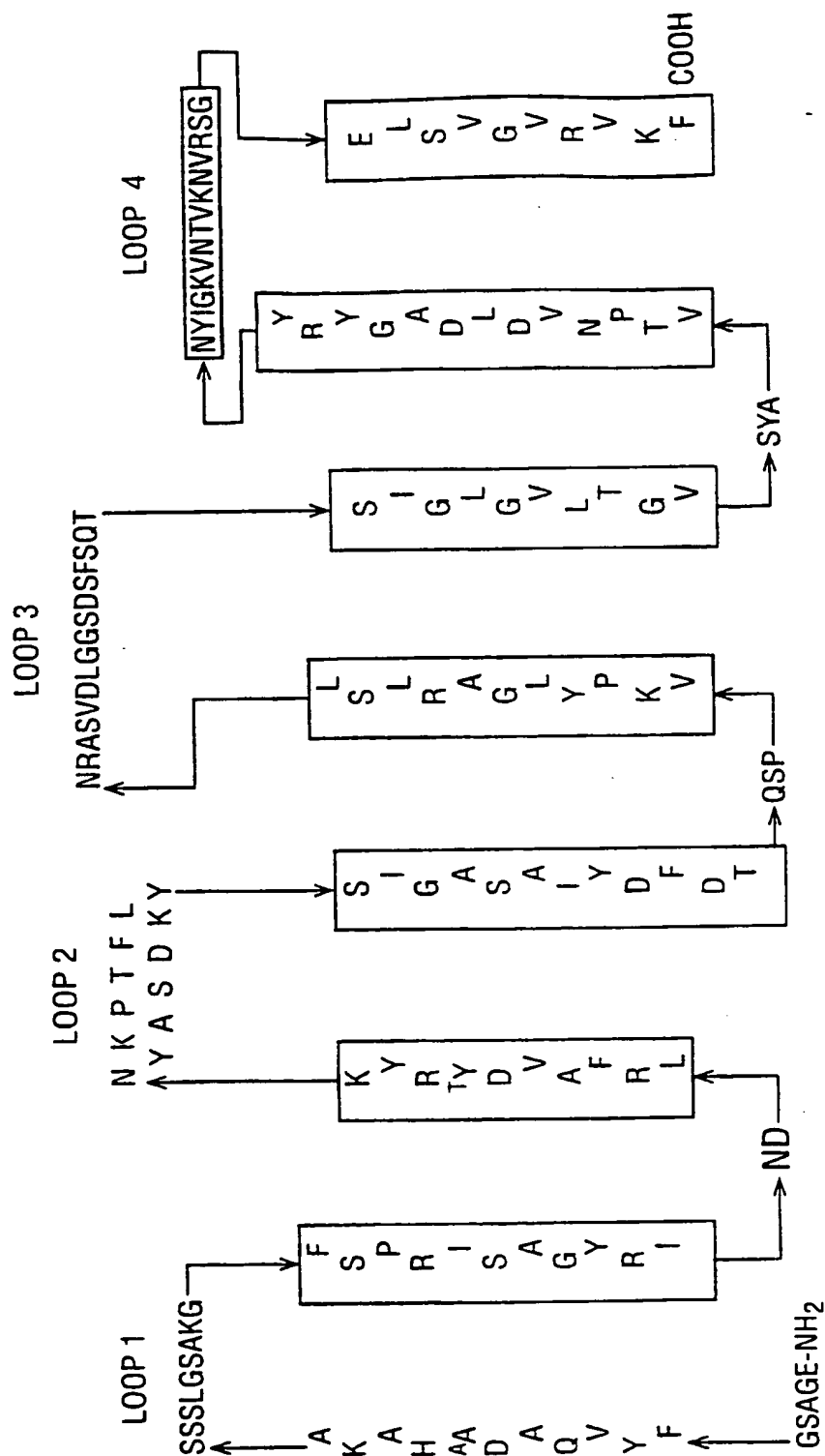
FIG. 31B(CONTD)



SUBSTITUTE SHEET (RULE 26)

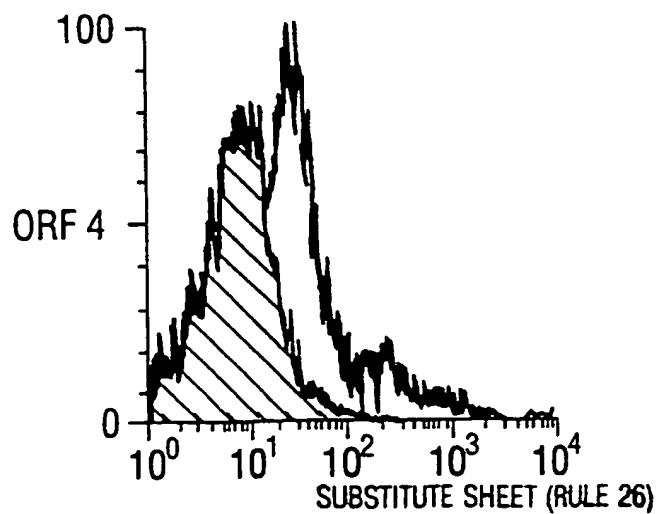
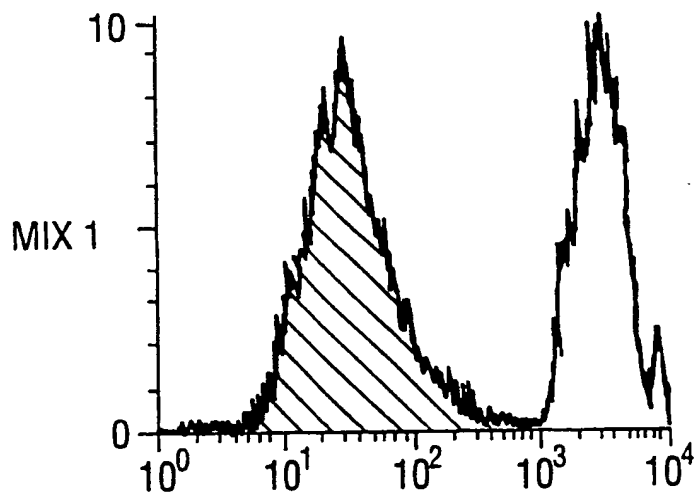
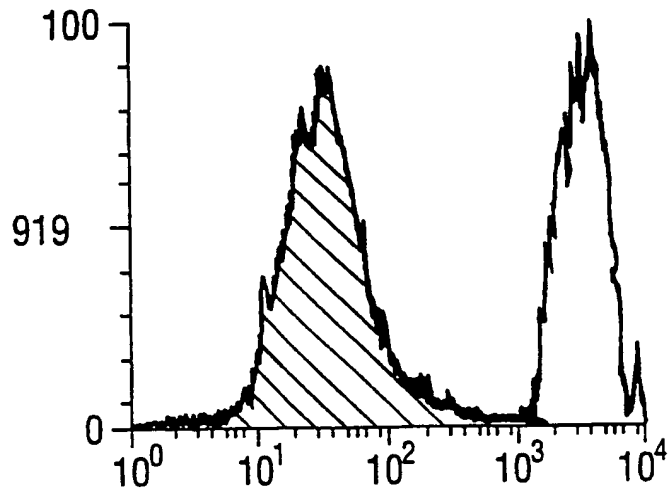
39/51

FIG. 32



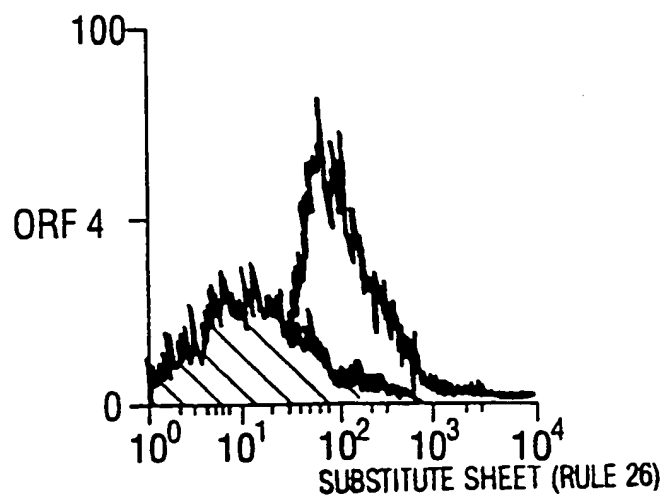
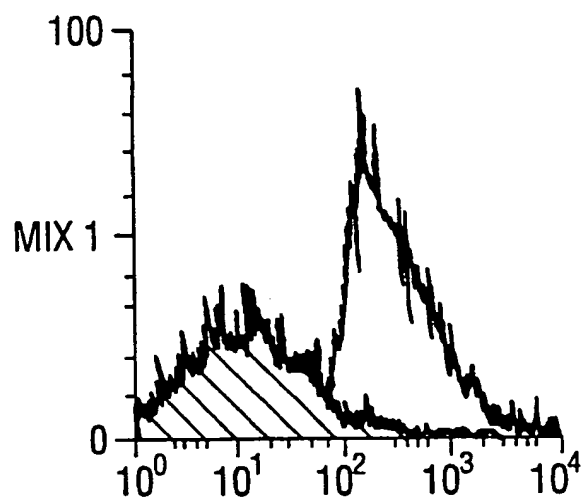
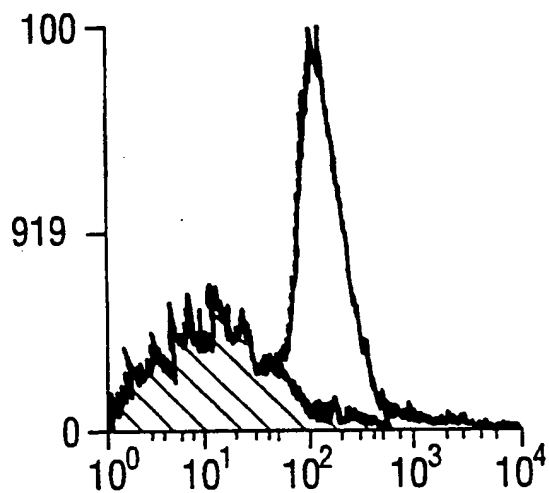
40/51

FIG. 33A



SUBSTITUTE SHEET (RULE 26)

41/51  
FIG. 33B  
2996

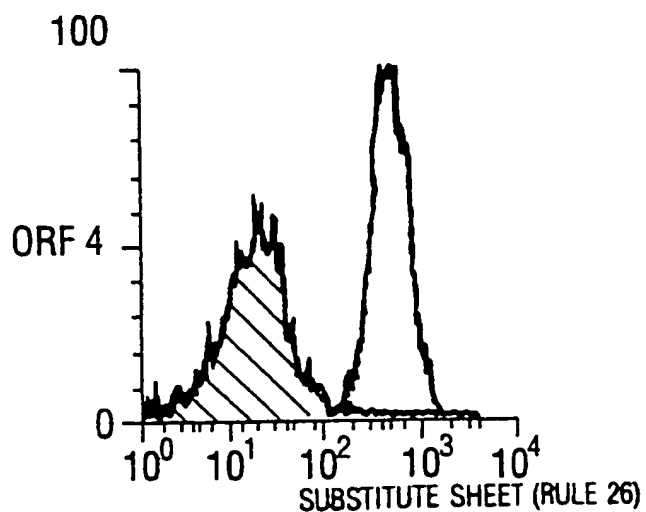
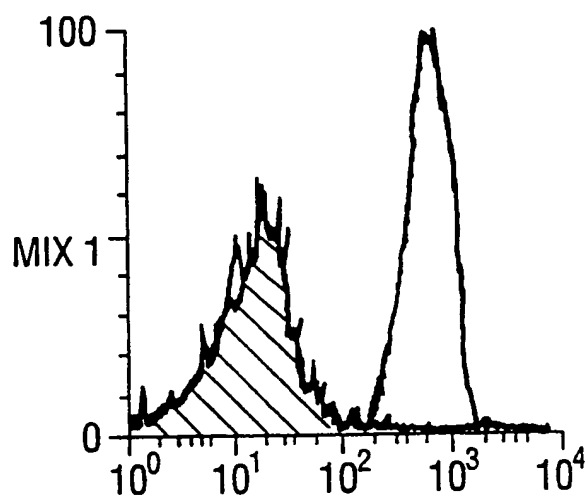
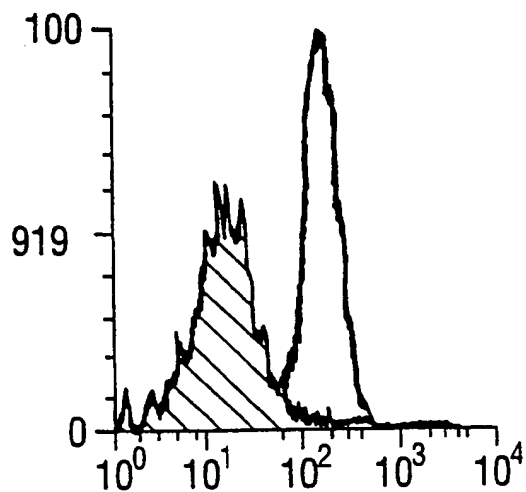


SUBSTITUTE SHEET (RULE 26)

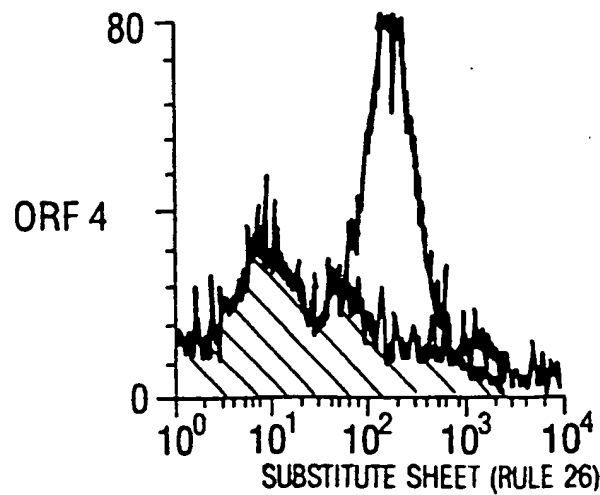
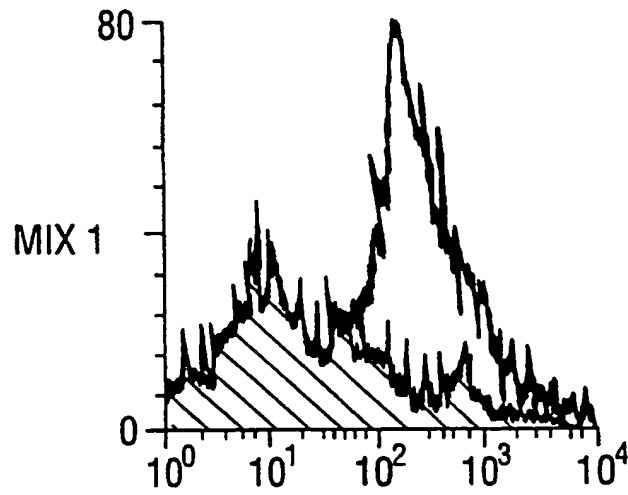
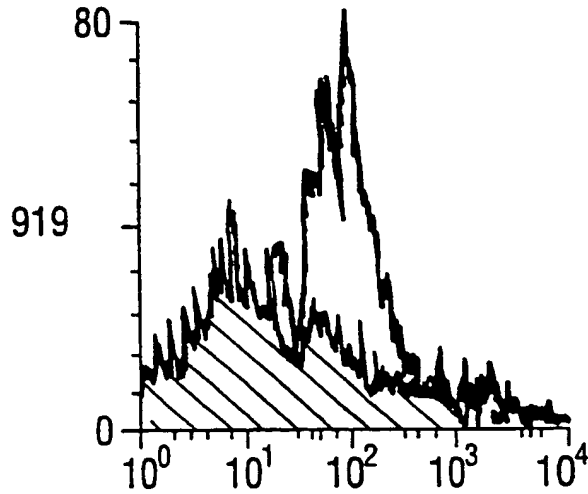
42/51

## FIG. 33B(CONTD.)

H44776

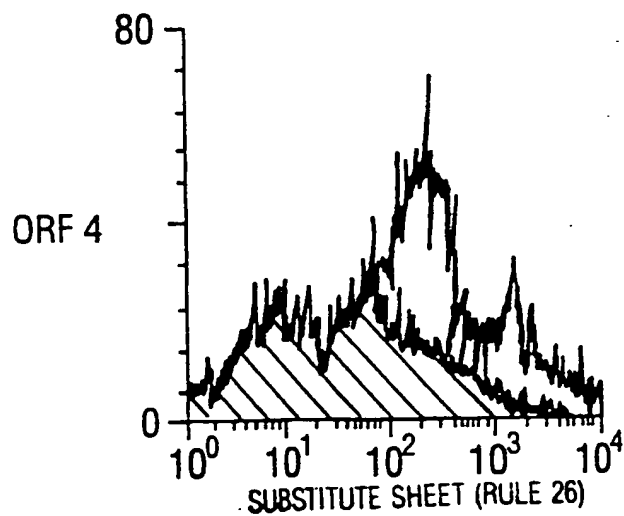
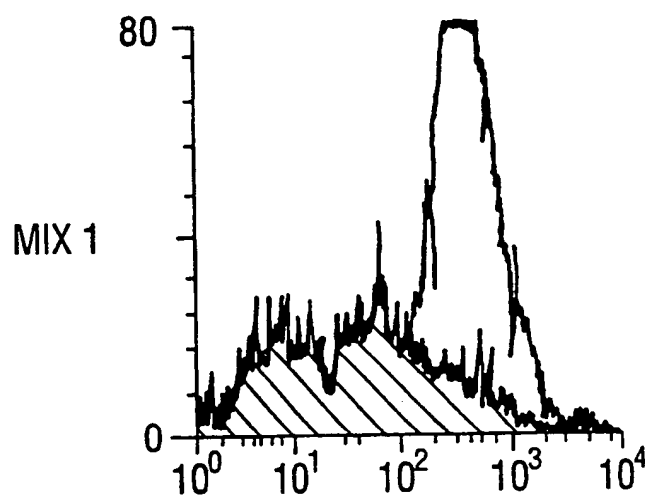
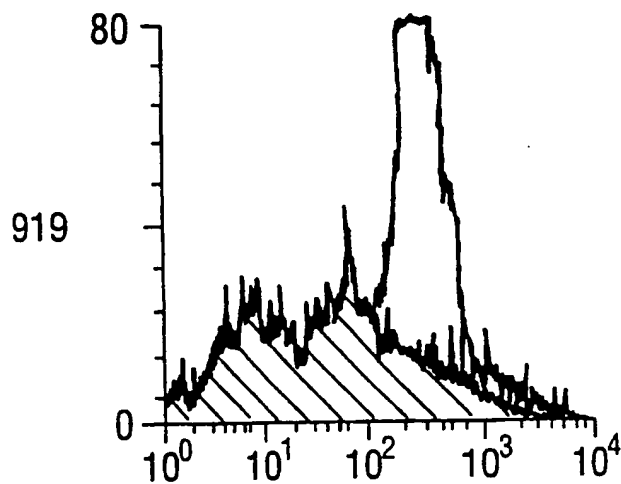


43/51  
 FIG. 33B(CONTD.)  
 MC58



SUBSTITUTE SHEET (RULE 26)

44/51  
FIG. 33B(CONTD.)  
1000



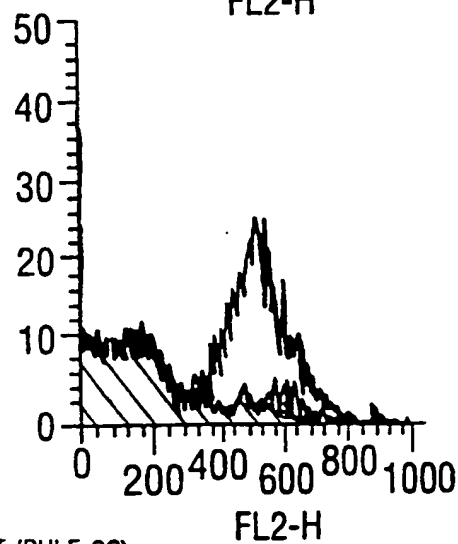
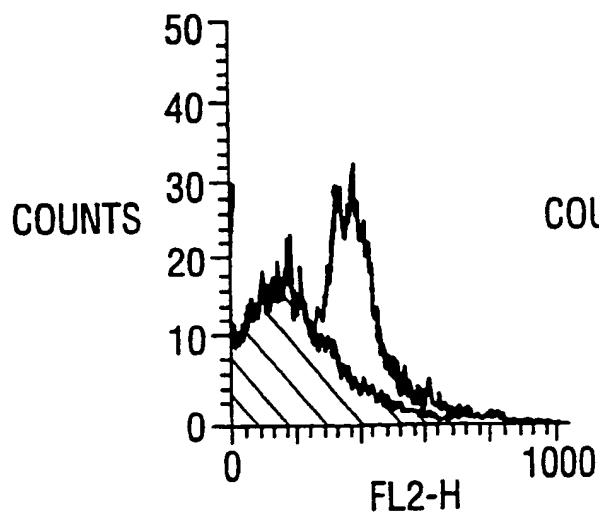
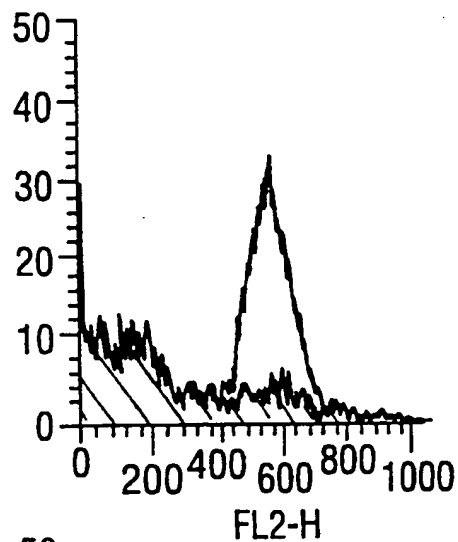
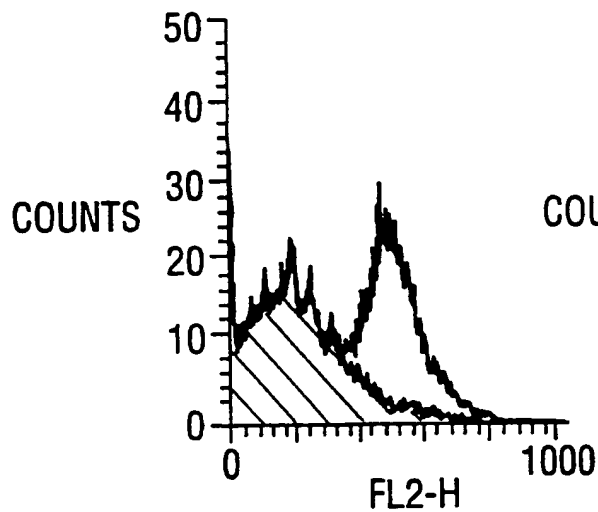
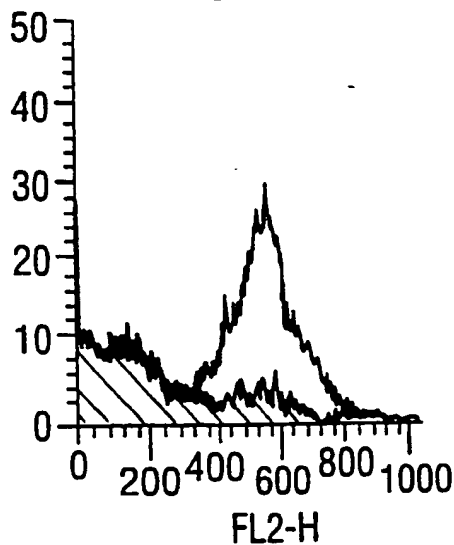
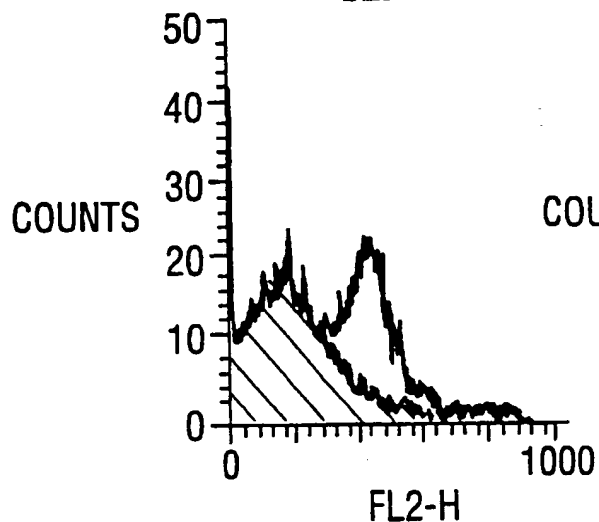


45/51

**FIG. 33B(CONTD.)**

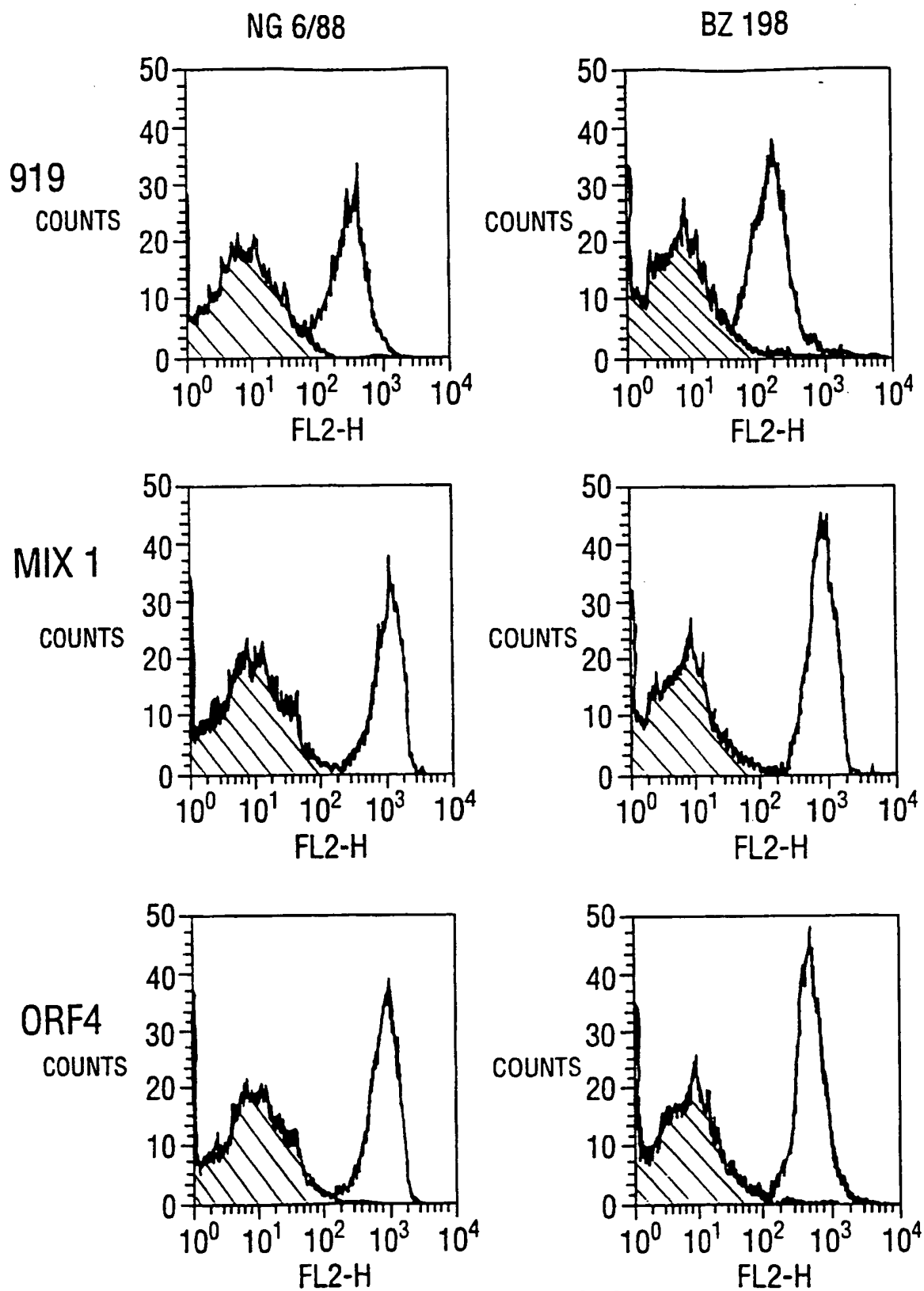
BZ232

BZ133



SUBSTITUTE SHEET (RULE 26)

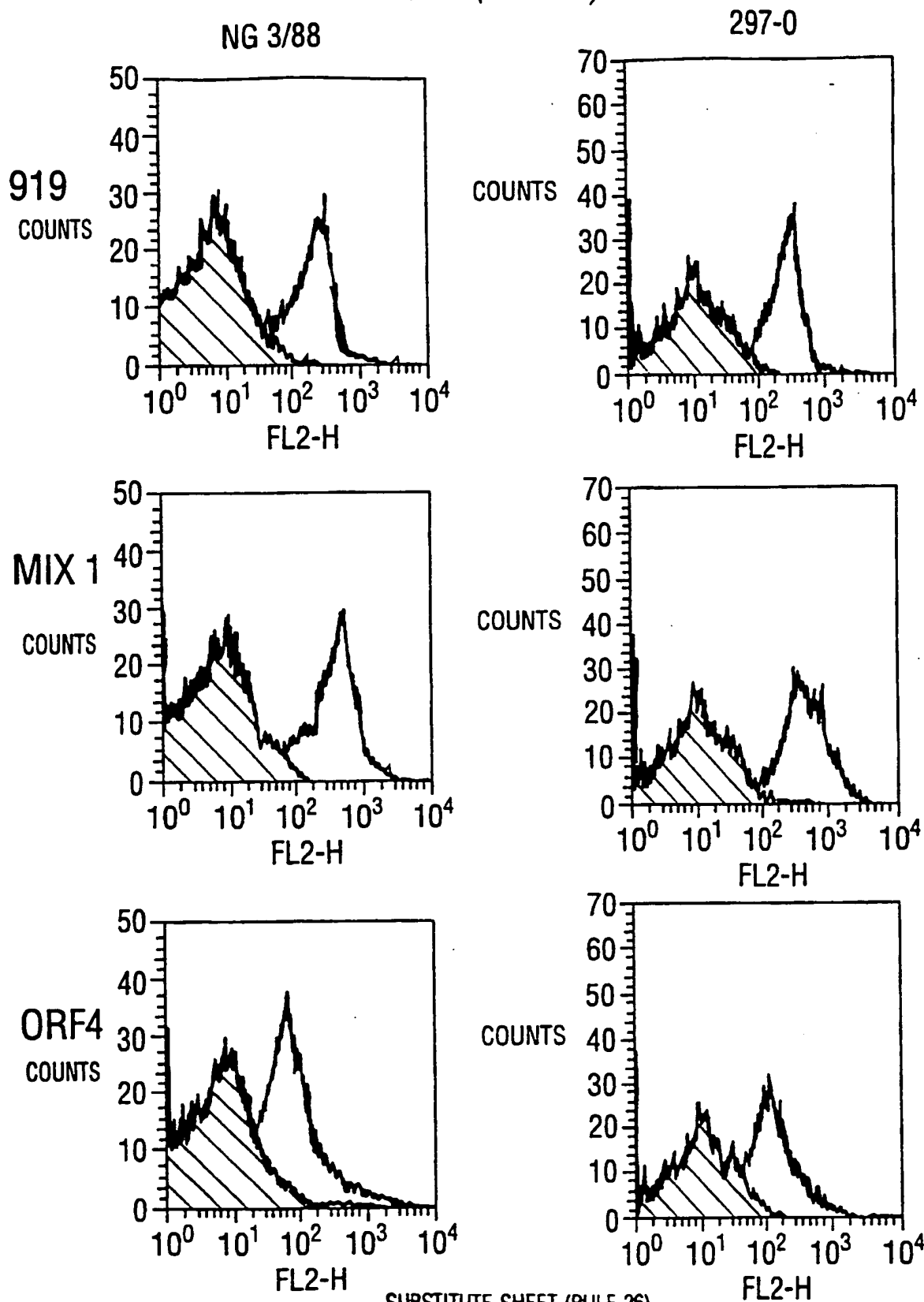
46/51

*FIG. 33B(CONTD.)*

SUBSTITUTE SHEET (RULE 26)

47/51

FIG. 33B(CONTD.)



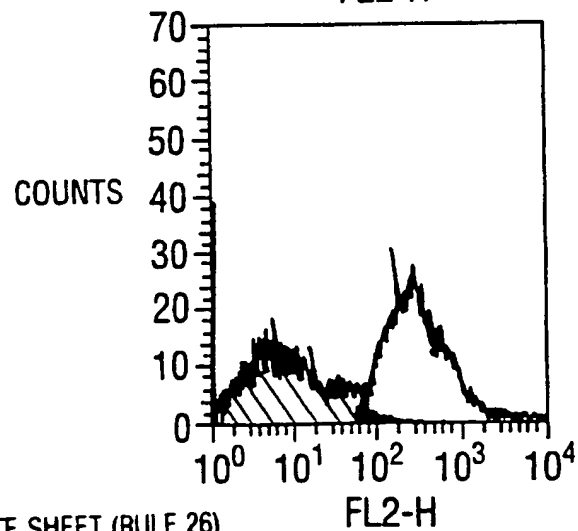
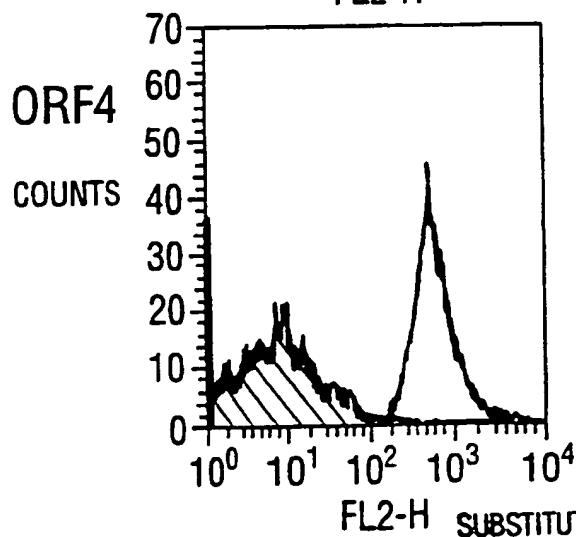
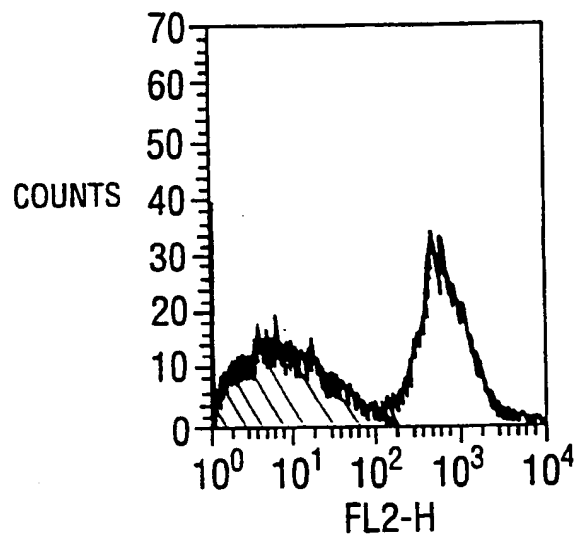
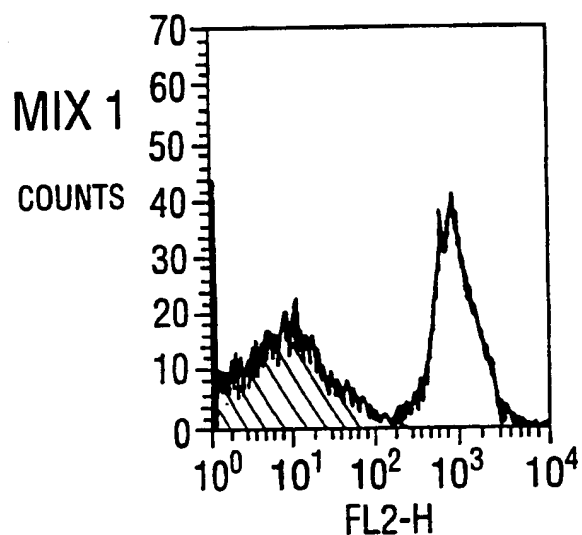
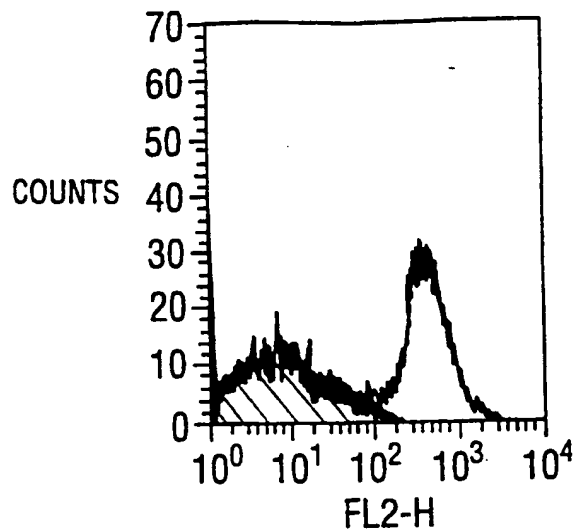
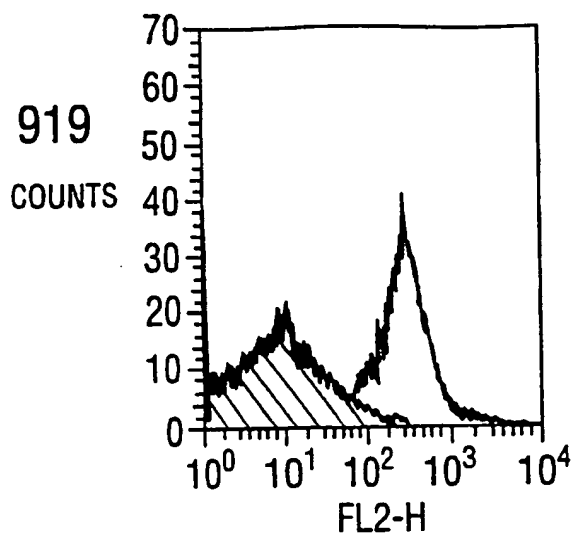
SUBSTITUTE SHEET (RULE 26)

48/51

**FIG. 33B (CONTD.)**

**BZ147**

**BZ 169**



**SUBSTITUTE SHEET (RULE 26)**

FIG. 34A

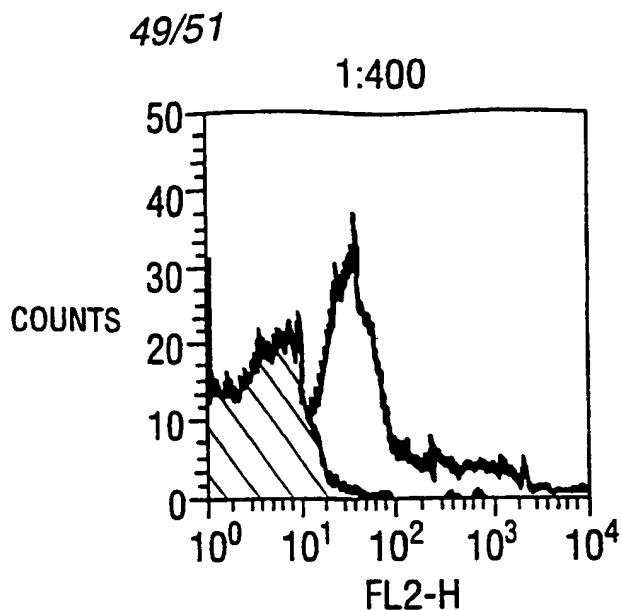


FIG. 34B

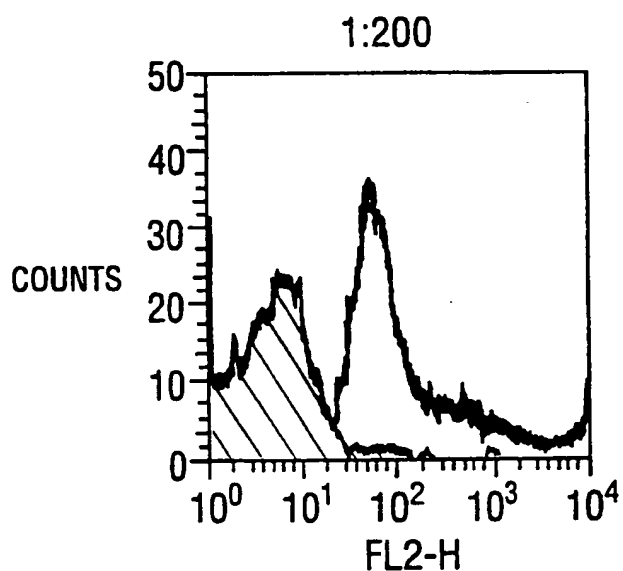
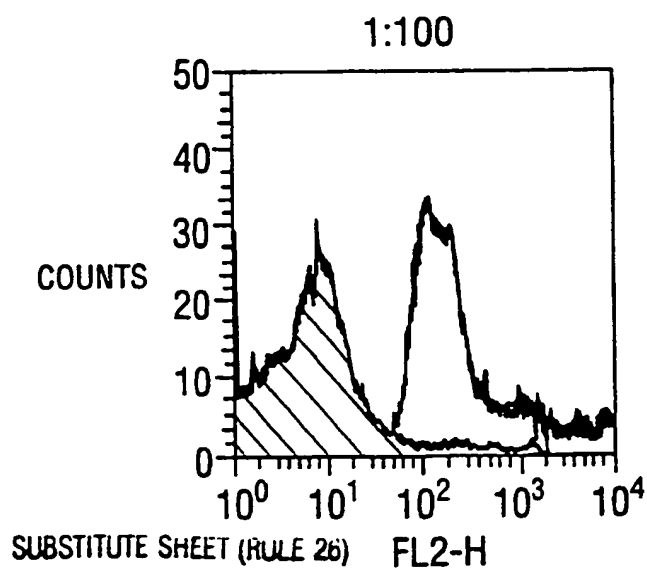


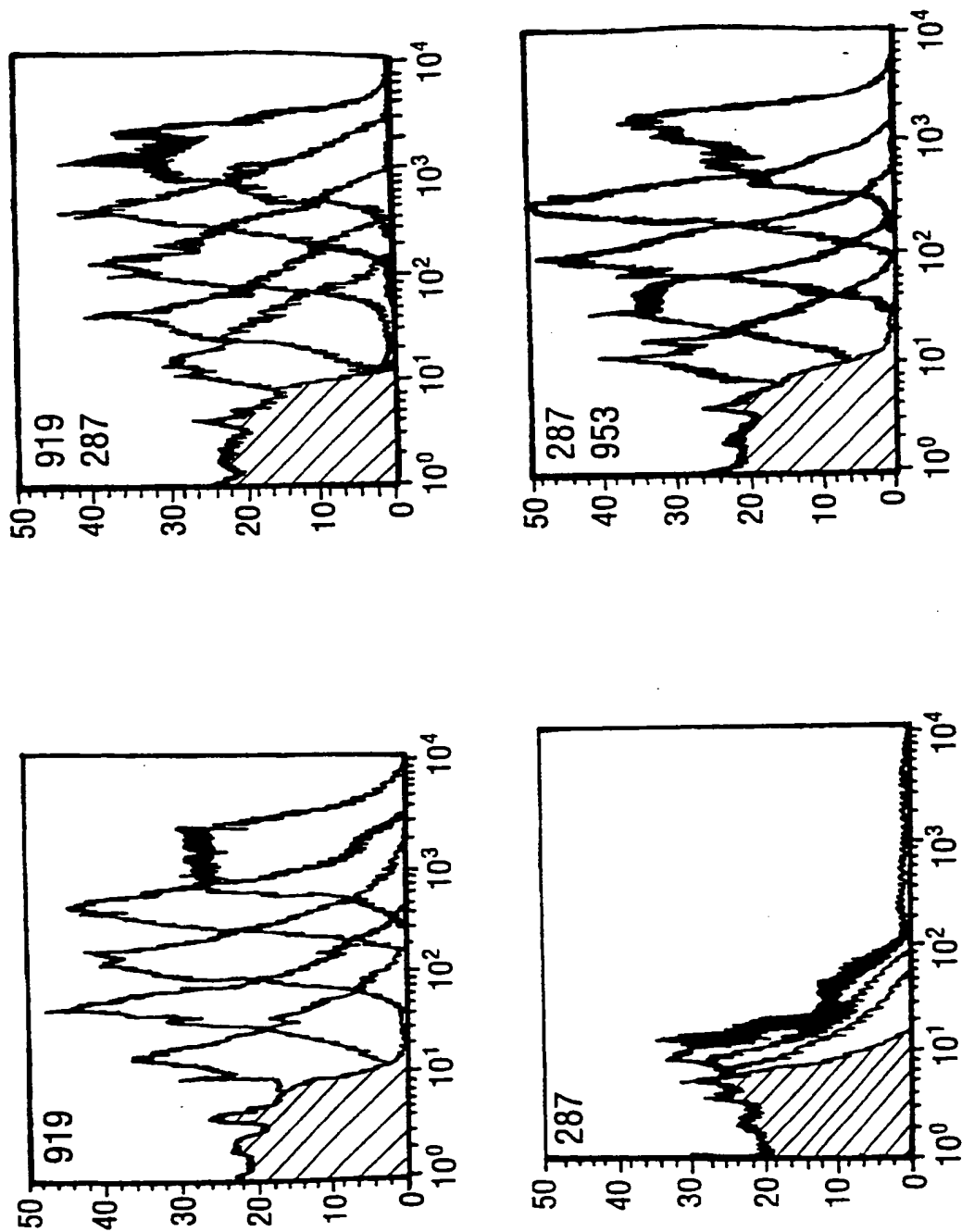
FIG. 34C



SUBSTITUTE SHEET (RULE 26)

50/51

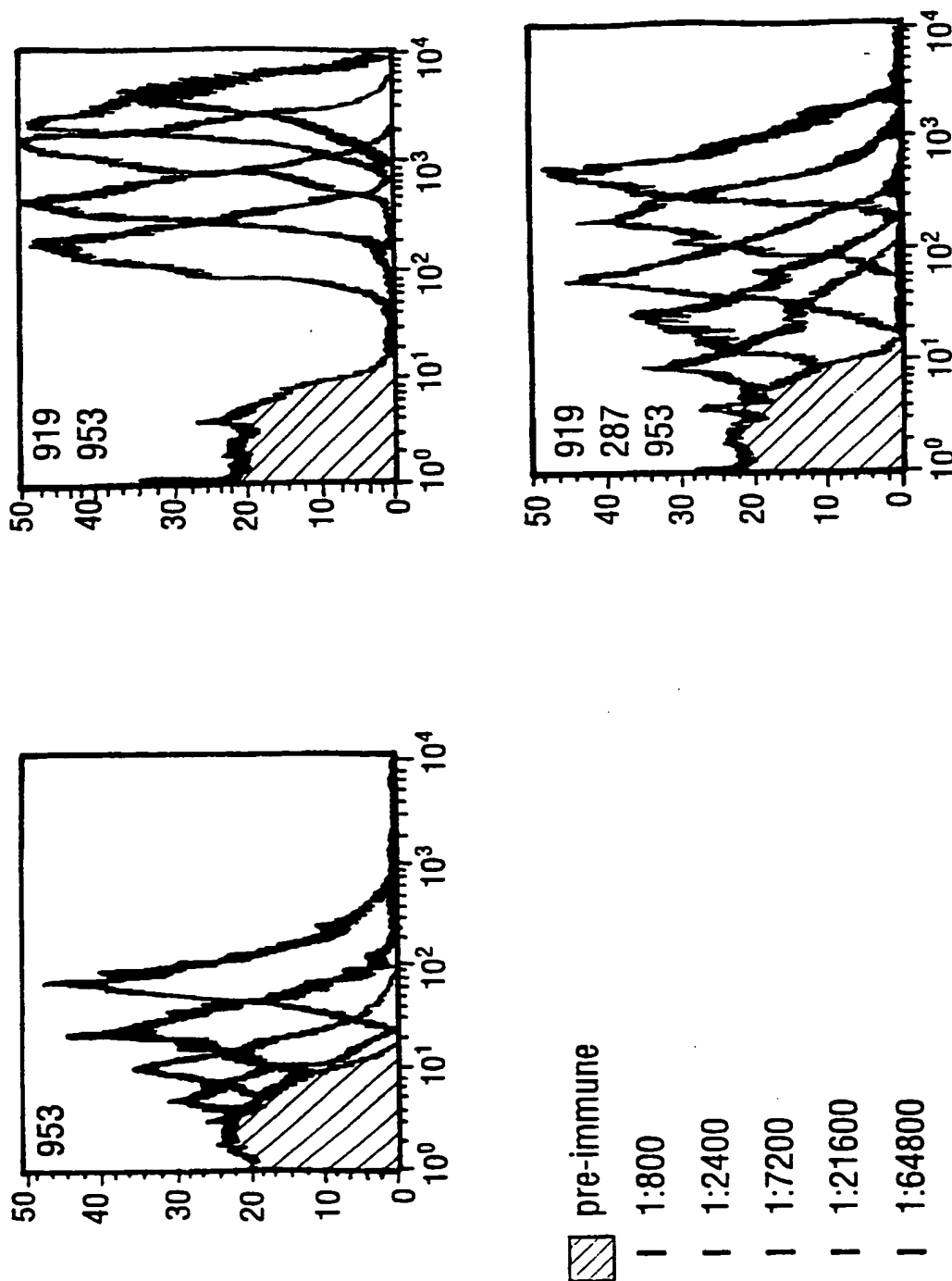
FIG. 35



SUBSTITUTE SHEET (RULE 26)

51/51

FIG. 35(Contd.)



SUBSTITUTE SHEET (RULE 26)

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
30 November 2000 (30.11.2000)

PCT

(10) International Publication Number  
**WO 00/71725 A3**

(51) International Patent Classification<sup>7</sup>: C12N 15/31,  
C07K 14/22, A61K 39/095

(21) International Application Number: PCT/IB00/00828

(22) International Filing Date: 19 May 2000 (19.05.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
9911692.3 19 May 1999 (19.05.1999) GB  
9919705.5 19 August 1999 (19.08.1999) GB  
0005730.7 9 March 2000 (09.03.2000) GB

(71) Applicant (for all designated States except US): CHIRON  
S.p.A. [IT/IT]; Via Fiorentina, 1, I-53100 Siena (IT).

(72) Inventors; and

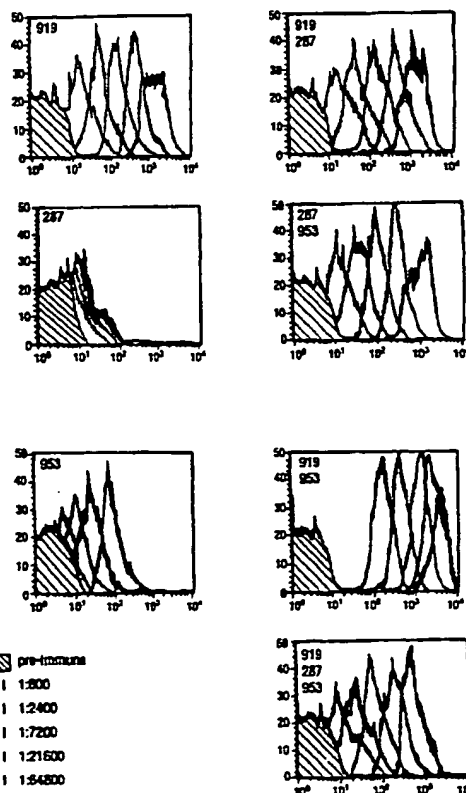
(75) Inventors/Applicants (for US only): GIULIANI, Marzia,  
Monica [IT/IT]; Chiron S.p.A., Via Fiorentina, 1, I-53100  
Siena (IT). PIZZA, Mariagrazia [IT/IT]; Chiron S.p.A.,  
Via Fiorentina, 1, I-53100 Siena (IT). RAPPUOLI, Rino  
[IT/IT]; Chiron S.p.A., Via Fiorentina, 1, I-53100 Siena  
(IT).

(74) Agents: HALLYBONE, Huw, George et al.; Carpmaels  
& Ransford, 43 Bloomsbury Square, London WC1A 2RA  
(GB).

(81) Designated States (national): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE,  
DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,  
ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,  
LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO,  
NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,  
TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

[Continued on next page]

(54) Title: COMBINATION NEISSERIAL COMPOSITIONS



(57) Abstract: Compositions comprising a first biological molecule from a *Neisseria* bacterium and a second biological molecule from a *Neisseria* bacterium. The term "biological molecule" includes proteins and nucleic acids. Preferred *Neisseria* species are *N.meningitidis* and *N. gonorrhoeae*.

WO 00/71725 A3





(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

(88) Date of publication of the international search report:  
28 June 2001

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**Published:**

— *With international search report.*

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/IB 00/00828

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 C12N15/31 C07K14/22 A61K39/095

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C07K A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, MEDLINE, EMBASE, CHEM ABS Data, BIOSIS, WPI Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	NL 8 901 612 A (NEDERLANDEN STAAT) 16 July 1990 (1990-07-16) page 3, line 34 - line 40; claims 6,8,10-22 ---	1,10
X	VAN DER LEY P ET AL: "Construction of a multivalent meningococcal vaccine strain based on the class 1 outer membrane protein" INFECT.IMMUN., vol. 60, no. 8, 1992, pages 3156-61, XP000946454 abstract ---	1,10
X	US 4 239 749 A (BUCHANAN THOMAS M) 16 December 1980 (1980-12-16) column 4, paragraph 3 - paragraph 4 --- -/--	1,10

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

26 September 2000

Date of mailing of the international search report

08. 01. 2001

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl  
Fax: (+31-70) 340-3016

Authorized officer

Gurdjian, D

10

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB 00/00828

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CHRISTODOULIDES, MYRON ET AL: "Immunization with a multiple antigen peptide containing defined B- and T-cell epitopes: production of bactericidal antibodies against group B Neisseria meningitidis" MICROBIOLOGY (READING, U. K.) (1994), 140(11), 2951-60, XP000946423 abstract; figure 1 ---	1,10
X	VAN DER LEY P. ET AL: "Construction of Neisseria meningitidis strains carrying multiple chromosomal copies of the porA gene for use in the production of a multivalent outer membrane vesicle vaccine" VACCINE, 1995, 13/4 (401-407), XP002148366 United Kingdom abstract; figure 11 ---	1,10
X	WO 97 10844 A (US ARMY MEDICAL RESEARCH MATER ;LOWELL GEORGE H (US); ZOLLINGER WE) 27 March 1997 (1997-03-27) example 2 ---	1,10
X	WO 97 28273 A (NORTH AMERICAN VACCINE INC) 7 August 1997 (1997-08-07) cited in the application claims 23,25; figures 4,9,13; example 16 ---	1,10
A	WO 96 29412 A (IAF BIO VAC INC ;BRODEUR BERNARD R (CA); MARTIN DENIS (CA); HAMEL) 26 September 1996 (1996-09-26) cited in the application abstract; figures SEQ.ID.1-26 ---	1-10
A	WO 95 03413 A (NORTH AMERICAN VACCINE INC ;UNIV ROCKEFELLER (US)) 2 February 1995 (1995-02-02) cited in the application figures SEQ.1-23 ---	1-10
P,A	WO 99 36544 A (PIZZA MARIAGRAZIA ;SCARLATO VINCENZO (IT); RAPPUOLI RINO (IT); CHI) 22 July 1999 (1999-07-22) cited in the application figures SEQ.1-90 ---	1-10
P,A	WO 99 24578 A (PIZZA MARIAGRAZIA ;SCARLATO VINCENZO (IT); RAPPUOLI RINO (IT); CHI) 20 May 1999 (1999-05-20) cited in the application figures SEQ.1-892 ---	1-10
	---	

10

-/--

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB 00/00828

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,A	<p>WO 99 57280 A (PIZZA MARIAGRATIA ;MORA  MARIROSA (IT); RAPPUOLI RINO (IT);  GALEOTT) 11 November 1999 (1999-11-11)  cited in the application  figures SEQ.1-3020  -----</p>	1-10

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/IB 00/00828

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
  
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
  
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
  
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
  
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims: it is covered by claims Nos.:

1-10 all partially

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: Invention 1 ; claims 1-10 partially

A composition comprising a first biological molecule protein, wherein said first biological molecule is selected from the group consisting of SEQ ID NOS: 1-8 , related to ORFs corresponding to example 1 , as disclosed in W09924578 .

2. Claims: Invention 2-104 ; claims 1-10 partially

Idem as subject 1 but limited to seq.id's related to ORFs corresponding to examples 2-104 , as disclosed in W09924578 , characterized by SEQ ID NOS: 9-892. (Invention 2 is limited to SEQ ID NOS: 9-10; Invention 3 is limited to SEQ ID NOS: 11-18; Invention 4 is limited to SEQ ID NOS: 19-28; .....; Invention 104 is limited to SEQ ID NOS: 885-892).

For the sake of conciseness, the first subject matter are explicitly defined, the other subject matters are defined by analogy hereto.

3. Claims: invention 105. Claims: 1-10 partially

A composition comprising a first biological molecule protein, wherein said first biological molecule is selected from the group consisting of Seq.ID:893-898

4. Claims: Invention 106 . Claims: 1-10 partially

As invention 105 but concerning seq.ID:899-904

5. Claims: Invention 107. Claims: 1-10 partially

As invention 105 but concerning seq.ID:905-908

6. Claims: Invention 108. Claims: 1-10 partially

As invention 105 but concerning seq.ID:909-914

7. Claims: Invention 109. Claims: 1-10 partially

As invention 105 but concerning seq.ID:915-916

8. Claims: Invention 110. Claims: 1-10 partially

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

As invention 105 but concerning seq.ID:917-922

9. Claims: Invention 111. Claims: 1-10 partially

As invention 105 but concerning seq.ID:923-926

10. Claims: Invention 112. Claims: 1-10 partially

As invention 105 but concerning seq.ID:927-930

11. Claims: Invention 113. Claims: 1-10 partially

As invention 105 but concerning seq.ID:931-932

12. Claims: Invention 114. Claims: 1-10 partially

As invention 105 but concerning seq.ID:933-936

13. Claims: Invention 115. Claims: 1-10 partially

As invention 105 but concerning seq.ID:937-942

14. Claims: Invention 116. Claims: 1-10 partially

As invention 105 but concerning seq.ID:943-948

15. Claims: Invention 117. Claims: 1-10 partially

As invention 105 but concerning seq.ID:949-954

16. Claims: Invention 118. Claims: 1-10 partially

As invention 105 but concerning seq.ID:955-956

17. Claims: Invention 119. Claims: 1-10 partially

As invention 105 but concerning seq.ID:957-958.

18. Claims: Invention 120. Claims: 1-10 partially

As invention 105 but concerning seq.ID:959-964.

19. Claims: Invention 121. Claims: 1-10 partially

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

As invention 105 but concerning seq.ID:965-970.

20. Claims: Invention 122. Claims: 1-10 partially

As invention 105 but concerning seq.ID:971-976.

21. Claims: Invention 123. Claims: 1-10 partially

As invention 105 but concerning seq.ID:977-982.

22. Claims: Invention 124. Claims: 1-10 partially

A composition comprising a first biological molecule protein, wherein said first biological molecule is selected from the group consisting of seq.id.983-984 .

23. Claims: Invention 125-1633 .Claims: 1-10 partially

Idem as invention 124 but for biological molecules limited to SEQ ID NOs:985-4002 . E.g., invention 125 limited to 985-986, invention 126: limited to SEQ ID NO:987-988... , invention 1633: limited to SEQ ID NO:4001-4002 .

For the sake of conciseness, the first above subject matters are explicitly defined, the latter subject matters are defined by analogy hereto.

24. Claims: Invention 1634.Claims 1,2, 4-10

A composition comprising a first biological molecule protein, wherein said first biological molecule is selected from the group consisting of seq.id.4003-4004 .

25. Claims: Invention 1635.Claims 1,2, 4-10

A composition comprising a first biological molecule protein, wherein said first biological molecule is seq.id.4005 .

26. Claims: Invention 1636.Claims 1,2, 4-10

A composition comprising a first biological molecule protein, wherein said first biological molecule is selected from the group consisting of seq.id.4006-4007 .

27. Claims: Invention 1637.Claims 1,2, 4-10



FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

A composition comprising a first biological molecule protein, wherein said first biological molecule is selected from the group consisting of seq.id.4008-4033 .

28. Claims: Invention 1638.Claims 1,2, 4-10

A composition comprising a first biological molecule protein, wherein said first biological molecule is selected from the group consisting of seq.id.4034-4056 .

29. Claims: Invention 1639.Claims 1,2, 4-10

A composition comprising a first biological molecule protein, wherein said first biological molecule is selected from the group consisting of seq.id.4057 for DNA and seq.id 6217 for encoded proteins .

30. Claims: Invention 1640-3798.Claims 1,2, 4-10

Same as invention 1639 but for DNA limited to the SEQ ID NOs:4058-6216 for encoded proteins limited to the corresponding SEQ ID NOs:6218-8376. E.g., invention 1640: limited to SEQ ID NO:4058 and SEQ ID NO:6218, invention 16414: limited to SEQ ID NO:4059 and SEQ ID NO:6219, ... , invention 3798 : limited to SEQ ID NO:6216 and SEQ ID NO:8376.

For the sake of conciseness, the first above subject matters are explicitly defined, the latter subject matters are defined by analogy hereto.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IB 00/00828

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
NL 8901612 A	16-07-1990	NL 8803111 A	16-07-1990
		AT 120093 T	15-04-1995
		AU 640118 B	19-08-1993
		AU 4821990 A	10-07-1990
		CA 2007248 A	06-07-1990
		DE 68921895 D	27-04-1995
		DE 68921895 T	07-09-1995
		DK 117491 A	15-08-1991
		EP 0449958 A	09-10-1991
		ES 2070312 T	01-06-1995
		JP 6503465 T	21-04-1994
		NO 305463 B	07-06-1999
		PT 92807 A,B	31-07-1990
		WO 9006696 A	28-06-1990
		NL 8900036 A	16-07-1990
US 4239749 A	16-12-1980	NONE	
WO 9710844 A	27-03-1997	AU 7113196 A	09-04-1997
		CA 2232410 A	27-03-1997
		CN 1211192 A	17-03-1999
		CZ 9800819 A	14-10-1998
		EA 980208 A	29-10-1998
		EP 0854729 A	29-07-1998
		HU 9901577 A	30-08-1999
		JP 2000507913 T	27-06-2000
		NO 981189 A	14-05-1998
		PL 325604 A	03-08-1998
WO 9728273 A	07-08-1997	AU 2115897 A	22-08-1997
		EP 0877816 A	18-11-1998
		HU 9901039 A	28-07-1999
		NO 983474 A	30-09-1998
		PL 328096 A	04-01-1999
WO 9629412 A	26-09-1996	AU 716225 B	24-02-2000
		AU 4934396 A	08-10-1996
		BR 9607651 A	17-11-1998
		CA 2215161 A	26-09-1996
		CZ 9702914 A	14-01-1998
		EP 0815234 A	07-01-1998
		HU 9702387 A	28-05-1998
		JP 11500624 T	19-01-1999
		NO 974264 A	13-11-1997
		PL 322363 A	19-01-1998
		SI 9620035 A	31-12-1998
		SK 125597 A	03-06-1998
WO 9503413 A	02-02-1995	US 5439808 A	08-08-1995
		AU 690570 B	30-04-1998
		AU 7371694 A	20-02-1995
		AU 711016 B	07-10-1999
		AU 7614798 A	22-10-1998
		BR 9407092 A	03-09-1996
		CA 2167677 A	02-02-1995
		EP 0713530 A	29-05-1996
		FI 960309 A	22-03-1996
		JP 9500538 T	21-01-1997

# INTERNATIONAL SEARCH REPORT

Information on patent family members

Inter. Appl. No.

PCT/IB 00/00828

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9503413 A		NO 960256 A	20-03-1996
		NZ 269996 A	24-10-1997
		PL 312712 A	13-05-1996
		US 6013267 A	11-01-2000
		US 5879686 A	09-03-1999
WO 9936544 A	22-07-1999	AU 1979599 A	02-08-1999
		EP 1047784 A	02-11-2000
WO 9924578 A	20-05-1999	AU 9363798 A	31-05-1999
		EP 1029052 A	23-08-2000
WO 9957280 A	11-11-1999	AU 3967799 A	23-11-1999